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PLINY

NATURAL HISTORY

VI

LIBRI XX-XXIII

PLINY

NATURAL HISTORY

WITH AN ENGLISH TRANSLATION
IN TEN VOLUMES

VOLUME VI
LIBRI XX-XXIII

BY
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PREFACE

I TAKE over the task of continuing the work of my friend, the late Mr. H. Rackham, with many fears lest my effort prove an unworthy sequel.

It is intended to add a complete index of plants at the end of Pliny's botanical section. This index is in course of preparation, but is proving a colossal task. To identify each plant or tree as it occurs would have involved many repetitions and cross-references, but a few identifications have been inserted in the text and notes where they seemed specially needed.

W. H. S. J.

INTRODUCTION

Books XX–XXVII of Pliny's *Natural History* are concerned with the uses of trees, plants and flowers, especially in medicine. To understand his treatment of this subject it is necessary to examine the diseases he dealt with and the nature of the remedies he prescribed.

DISEASES OF ITALY, AND THEIR NAMES IN PLINY.

The chief diseases in Pliny's day were those of the chest, skin and eyes, together with the various forms, intermittent or remittent, of malaria (ague). The ordinary infectious fevers—smallpox, measles, scarlet fever, diphtheria, enteric, influenza—were apparently unknown. Enteric is doubtful, because it is so like certain types of remittent malaria, which was very prevalent, that only the microscope can distinguish between them. Plague (*pestis*, *pestilentia*) often appeared in epidemic form, and, when not malignant malaria, was probably typhus or bubonic plague. The main difficulty met when attempting to find modern equivalents for ancient diseases is due to the old method of diagnosis, that is, by general symptoms. Two cases superficially alike were usually called by the same name. Many things besides gout were included under *podagra*, many besides leprosy under *lepra*, many besides cancer under *carcinoma*.

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Chest diseases.—There is little difficulty in identifying these. Pleurisy is generally referred to as *laterum dolor*, and consumption is *phthisis*, but the Romans did not often use the Greek word *περιπνευμονία*.

Skin diseases.—*Vitiligo* included more than one kind of psoriasis: *alphos* (dull white), *melas* (dark) and *leuce* (bright white).

Psora was a term for several diseases, including leprosy. Often our "itch."

Leprae (the singular is late) seems to refer to scaly conditions of the skin accompanied by pruritus.

Scabies was not our scabies, which is limited to the pustules caused by the itch insect. Celsus (V. 28, 16) describes it as a hardening of the skin, which grows ruddy, and from it grow pustules with itching ulceration. Probably several kinds of eczema are included under this term.

Impetigo.—The modern meaning of this term is rather vague, and the Romans apparently used it of some kind of eczema. Celsus (V. 28, 17) says that there are four kinds, increasing in severity, the fourth being incurable. He says that it is like scabies, the ulceration being worse.

Lichen was used of several sorts of eruption; very often it is ringworm. On the chin it was called *mentagra*.

Epinyctis (night pustule) caused by fleas and bugs. It was also an ailment of the eyes. See p. ix.

Eye diseases.—The same overlapping of meanings, which makes so difficult the accurate identi-

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fication of ancient descriptions of disease, meets us again when we come to complaints of the eyes. These were very common, because dust was everywhere, and hygienic rules for keeping it uncontaminated were unknown. Moreover, there were no mechanical aids, such as spectacles. Pliny mentions *aegilops*, *albugo*, *argema*, *caligo*, *epinyctis*, *epiphora*, *glaucoma*, *hypochysis*, *inflammatio*, *lippitudo*, *nubeculae*, *nyctalops*, *prurigo*, *pterygium*, *scabritia*, *suffusio*, as well as other disorders, nervous or functional. Some of these names, laying stress on a prominent symptom, which is common to more than one eye trouble, cannot be safely assigned to any particular modern disease, but a few identifications are fairly certain.

Aegilops.—This was a lacrimal fistula, at the angle near the nose.

Albugo.—Occurring only in Pliny, meant a white ulcer; it is uncertain of what kind. *Albugines* could occur on the head (XXVI. § 160).

Argema.—A small white ulcer, partly on the cornea, partly on the sclerotic coat of the eye.

Caligo.—Any dimness, particularly that caused by ophthalmia.

Epinyctis.—A sore on the eyelid. See p. viii.

Epiphora.—Any flux from the eye.

Glaucoma.—An opaqueness of the crystalline lens.

Hypochysis.—Cataract.

Lippitudo.—Ophthalmia, inflammation of the eye.

Nubecula.—A cloudy film over the eye, perhaps sometimes a form of cataract.

Nyctalops.—One who is afflicted with night blindness.

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Prurigo.—Chronic itching of the eye.

Pterygium.—Also called *unguis*, an inflammatory swelling at the inner angle of the lower lid. Also whitlow.

Scabritia.—Inflammation of the eyelid.

It will be seen that often a Latin name can be associated only with a symptom or symptoms. Moreover, Pliny's nomenclature does not altogether coincide with that of Celsus, so that the invaluable aid of the latter is not always available.

Abscesses are called by various names, such as *carbunculus*, *collectio*, *furunculus*, *panus*, *parotis*, *tumor*. The *parotis* received its name from its position by the ear, the *panus* was a superficial abscess in a hair follicle (Spencer on Celsus V. 18, 19), and the others probably denoted variations in size or severity.

There is much confusion in the use of Latin terms to denote conditions due to mortification and putrefaction of the tissues. We have the terms *cancer*, *carcinoma*, *erysipelas*, *ignis sacer*, *phagedaena*, and Pliny's favourite word *ulcera*, very often qualified by an adjective or participle like *vetera*, *manantia*, *putrescentia*, *serpentia*. On the other hand there are the modern terms sepsis, erysipelas, lupus, shingles, gangrene, cancer. Identifications are often difficult, or even impossible, and the medical historian, faced with the Latin names, can do little more than make probable guesses.

Pliny does not use the word *erysipelas*, but *ignis sacer*, and this may sometimes refer to lupus or to shingles (XXVI. § 121). *Phagedaena* is certainly gangrene, and so perhaps are *ulcera serpentia* or *putrescentia*. Superficial malignant disease would

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be included under *carcinoma*, but neither Celsus nor Pliny says anything about internal cancer, though this was known to Hippocrates (*Aphorisms* VI. 38).

Podagra presents a problem to the translator. "Gout" is really too narrow an equivalent, for *podagra* and *chiragra* were used of any pain in the joints of the feet and hands. Usually, however, our gout is meant, unless Dr. Spencer is right when he says (Celsus I. 464) that chronic lead poisoning, which presents the symptoms of gout, may have been common at Rome owing to the extensive use of lead water-pipes.

Two terms are very troublesome to the translator—*opisthotonus* and *orthopnoea*, and a third, *angina*, is almost equally so. The diseases concerned are discussed by Celsus in IV. 6, 1, IV. 8, 1 and IV. 7, 1. These are translated by Dr. W. G. Spencer as follows:—

(a) "There is, however, no disease more distressing, and more acute, than that which by a sort of rigor of the sinews, now draws down the head to the shoulder-blades, now the chin to the chest, now stretches out the neck straight and immobile. The Greeks call the first *opisthotonus*, the next *emprosthotonus*, and the last *tetanus*, although some with less exactitude use these terms indiscriminately."—IV. 6, 1.

(b) "There is also in the region of the throat a malady which amongst the Greeks has different names according to its intensity. It consists altogether in a difficulty of breathing; when moderate and without any choking, it is called *dyspnoea*; when more severe, so that the patient cannot breathe

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without making a noise and gasping, asthma; but when in addition the patient can hardly draw in his breath unless with the neck outstretched, orthopnoea."—IV. 8, 1.

(c) "Whilst this kind of disease involves the region of the neck as a whole, another equally fatal and acute has its seat in the throat. We call it angina; the Greeks have names according to its species. For sometimes no redness or swelling is apparent, but the skin is dry, and breath drawn with difficulty, the limbs relaxed; this they call synanche. Sometimes the tongue and throat are red and swollen, the voice becomes indistinct, the eyes are deviated, the face is pallid, there is hiccough; that they call cynanche: the signs in common are, that the patient cannot swallow nor drink, and his breathing is obstructed."—IV. 7, 1.

According to Jan's *Index*, *opisthotonus* occurs in Pliny 24 times, *tetanus* 9 times, and *emprosthotonus* not at all. According to the same *Index*, *dyspnoea* is mentioned 4 times, *asthma* twice, *orthopnoea* 28 times, and *suspiriosi* (not apparently in Celsus) 34 times.

The first reaction of a reader is to infer that Pliny was lax in his use of these terms, as Celsus says some people were in their use of the terms for the various forms of tetanus. But Pliny is not an original authority; he is merely a note-taker, borrowing his technical terms from other writers, whether Greek or Roman. The laxity (if laxity there is) is not Pliny's, but that of his sources. It is possible that *suspiriosus* is a word which was in general use, and not a technical term of the physicians. With the Latin text before his eyes, the reader should not be

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confused if I translate *opisthotonus* by "opisthotonic tetanus," and any of the breathing complaints "asthma."

It is curious that Pliny makes so few references to the common cold. *Gravedo*, according to Jan's *Index*, occurs 4 times, and *destillatio* 17 times. Of these some, e.g. XX. 122, refer to catarrh, not of the throat and nose, but of the stomach. It may be that in ancient times catarrhs were less troublesome than to-day, if not absolutely at least in comparison with other minor ailments.

The medical historian feels more confident when discussing the meaning of *febris*. This is sometimes just the symptom, high temperature, as we often call it, that accompanies so many serious illnesses. It can also denote, not a mere symptom, but a disease, and then it is almost always malaria that is meant. As has been said, the common infectious fevers of modern times cannot be identified with any described by the ancient medical writers, but malaria can be diagnosed with ease and certainty, owing to its periodicity, its *habitat*, its seasonal epidemics, and its effect upon the spleen.

Quartana febris, quartan ague, with attacks after intervals of two days;
tertiana febris, tertian ague, with attacks every other day;
cottidiana febris, quotidian ague, with attacks every day.

There were also, besides these intermittent fevers, remittent or subcontinuous forms, which were much more serious. Pliny does not mention the *καῦσος* and *ἡμυπριταῖος* which Hippocrates and Galen deal

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with so fully, but he often speaks of two other dangerous forms, *phrenitis* and *lethargus*, the former characterised by wild delirium, the latter by heavy coma. As we should expect, the terms are often used to describe, not the disease, but its characteristic symptom, even when that was not due to pernicious malaria.

Malaria is most common in marshy places, and is epidemic in summer and autumn. One of its usual sequelae is an enlarged spleen, which is not so often heard of in countries free from malaria. As the ancients thought that malaria was caused by black bile (μέλαινα χολή), μελαγχολία and μελαγχολικός were often used to describe the depressed mental condition that tends to accompany or to follow it. Pliny refers to *melancholici* about a dozen times, but we cannot be certain that he is speaking of malarial melancholia, and not of chronic biliousness.

REMEDIES AND DRUGS.

The remedies mentioned in Pliny's prescriptions are chiefly herbal, and the chemicals used are mostly for external application. Writing for laymen, he is concerned almost entirely with what may be called home medicines, but the number of these is enormous. The simple, often superstitious, remedies of the countryside were at an early date prepared for town dwellers by druggists (φαρμακοπῶλαι), who are referred to by Aristophanes^a and other writers, although the contemporary physicians of the Hippocratic school made little use of drugs, relying on regimen and the *vis naturae medicatrix* to bring about

^a See *Clouds* 767. These druggists had their "side-lines," dyes, poisons and probably charms.

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a cure. By the time of Pliny, however, the use of drugs was much more in favour with professional physicians, and very common indeed among the amateur doctors who treated themselves and their families when they fell sick. Sometimes modern medicine approves of the prescriptions given in the *Natural History*, but for the most part they are of little or no value, and occasionally even dangerous. Amulets and other charms, often mentioned, were evidently popular, but Pliny himself seems on the whole to be non-committal as to their efficacy, although he condemns magic in the first chapters of Book XXX.

This faith in drugs and charms may be, at least in part, due to the probable increased prevalence of malaria in the first century A.D. Ancient medicine was powerless against it, and its victims betook themselves to drugs, at the same time developing a timid inferiority complex with regard to the predisposing causes—chill, exposure and fatigue. Among the *Moralia* of Plutarch is an essay on keeping well (*de sanitate tuenda praecepta*). It consists chiefly of rules for avoiding "fever" by abstaining from excess or strain of all kinds. In fact it seems as though the old Greek cult of physical fitness and beauty—for there was a science of health as well as of healing—had been replaced by something very near to valetudinarianism.

There is at least one ingredient of the Plinian remedies that must have been of great value. Honey appears again and again in both potions and external applications, full use being made of its healing powers. The superseding of honey by sugar has been by no means an unmixed blessing.

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THE BOTANY OF PLINY.

The identification of plants mentioned in the *Natural History* is a difficult matter. Pliny was not a botanist, but derived his information from books, which were often read aloud to him while he took notes, and not studied at leisure. Naturally he made mistakes due to misunderstandings. Pliny's authorities again were sometimes inadequate or confused or even wrong. In addition to the difficulties caused by positive error, there is also another one due to the fact that the same name was often given to more than one plant, and the same plant was often called by more than one name. Accordingly even a trained botanist hesitates at times to give with any confidence the modern equivalent of an ancient name in some particular context. Sometimes, of course, there is no reasonable doubt; *rosa* is rose, and *cepa* onion. Often, however, even when certain that a Latin or Greek name is generally equivalent to an English one, the botanist is not sure that a variety included by Pliny, or Theophrastus, under the former should also be included under the latter. The degree of doubt may vary from a moral certainty to a slight suspicion. Typical difficulties are those facing the translator when he has to render into English *asparagus*, *hyacinthus* and *strychnos*. To keep the Latin name always would be consistent, but cumbersome and pedantic. It seems better to give the English name when the risk of error is slight, but to keep the Latin when the risk is great. An index of plants,^a with probable or possible identifications, should give most readers the information

^a This index is in course of preparation, and will appear at the end of Pliny's botany books.

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they require. But some inconsistencies and uncertainties are inevitable.

The resemblance of certain passages in the *Materia Medica* of Dioscorides to parts of the botanical books of Pliny—even to some parts outside these books—is so striking that there must be a close relation between them. Scholars without hesitation use the Greek text when passing judgment on the readings or emendations of the manuscripts of Pliny. Many times it is clear that Pliny either saw (or heard read) Greek identical, or almost so, with our Dioscorides, but blundered badly in translating his authority. Among the cases of such blundering mentioned in the footnotes to this volume there is a striking example in XXIII. § 7, where Pliny has *cicatricibus marcidis, ossibus purulente limosis*, but the text of Dioscorides reads (V. 5): πρὸς . . . οὖλα πλαδαρά, ὧτα πυορροοῦντα. Here are confused οὖλα (gums) and οὐλή (scar), and (unless with some editors we read *auribus* for the *ossibus* of the manuscripts) ὧτα and ὀστέα.

Now Pliny does not include Dioscorides among his authorities. Is this an accidental omission? Pliny's pride in acknowledging the sources from which he derived his information makes this an almost impossible explanation of the relationship between the two authors. It is even more unlikely that Dioscorides copied Pliny; the discrepancies, for one thing, are obviously the result of a misunderstanding of Greek, not of Latin.

There remains a third possibility. Both authors may have a common source, from which each made large borrowings. It is thought that this common source may have been Crateuas, of the first century

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B.C., a famous herbalist (ῥιζοτόμος) mentioned by both Pliny and Dioscorides. There is an interesting (and genuine) fragment of Crateuas that can fortunately be compared with Dioscorides II. 176 and Pliny XXI. § 164.^a Several phrases in Crateuas are exactly, or almost exactly, the same as the corresponding phrases in Dioscorides, so that it is certain that the latter made full use of the material collected by the former. It may be that Pliny, too, read Crateuas, but he is not as close to Crateuas as is Dioscorides in the passage under consideration, so that some hold that Pliny got most of his information from one Sextius Niger, who, as Pliny tells us, wrote in Greek. A yet earlier physician and herbalist, Diocles of Carystos, may be the original source of all the later writers on *materia medica*. Speculation on such a point is useless, but our knowledge is sufficient to show that Pliny had access to writings so similar to the work of Dioscorides that the resemblances between the two authors can be explained without supposing that Pliny was a deceitful plagiarist.

NOTE ON THE MAGI.

The early history of the Magi is obscure, although modern research ^b has done much to put the main

^a See the German translation of Dioscorides by J. Berendes (Stuttgart, 1902), p. 8. See also Wellmann, *Dioscorides* Vol. III. pp. 144-148, especially fr. 4 of Crateuas on p. 144.

^b See e.g. the article in Pauly s.v. *magoi*, and that in Hastings' *Encyclopedia of Religion and Ethics*. See also the admirable summary in How and Wells' *Commentary on Herodotus* Vol. I. Appendix viii, pp. 407-410, and a most interesting note by A. D. Nock in *The Beginnings of Christianity*, Part I, by Foakes Jackson and Kirsopp Lake, pp. 164-188. The writer considers Apion to be Pliny's authority.

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outlines into clear relief. Originally they were a local tribe of the Medes, who became a priestly caste, thus presenting a curious parallel to the tribe of Levi among the Hebrews. Greek tradition had it that the Magian religion was introduced among the Persians by Cyrus, and there is nothing improbable in this belief. It certainly contained much esoteric knowledge and priestcraft, but whether any "magic" was employed is a matter of dispute; a fragment of Aristotle^a expressly denies it, but Herodotus^b speaks of Magian incantations. This narrow denotation of Magi was gradually widened, resulting finally in the use of the word "magician."

By the beginning of the first century A.D. the word had gone half-way on its journey. The Magi could be "wise men from the East,"^c and Cicero speaks of them as "wise and learned men among the Persians,"^d but Ovid^e mentions *cantusque artesque magarum*, that is, witches' spells and incantations.

Pliny devotes the first eighteen sections of his thirtieth book to a consideration of the Magi. His account of their origin is true in its outlines, though combined with much obvious fable. He speaks of their art as springing from *medicina*, reinforced by *religio* and *artes mathematicae*.^f Some of the Magian methods are given in XXVIII. § 104 (*lucernis, pelvi, aqua, pila*) and at slightly greater length in XXX. § 14 (*aqua, sphaeris, aëre, stellis, lucernis, pelvibus, securibus*); they are curiously suggestive of modern fortune-

^a Fr. 36 τὴν γοητικὴν μαγείαν οὐδὲ ἔγνωσαν.

^b See e.g. VII. 191.

^c See Matthew II. 1, 2.

^d *De Div.* I. 23, 46 and I. 41, 90. Cf. Juvenal III. 77.

^e Ovid *Metamorphoses* VII. 195.

^f Pliny XXX. § 1; by the last (*artes mathematicae*) is meant astrology.

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telling. It does not surprise us that in several places Pliny speaks of Magian *vanitas*, so large was the element of witchcraft and sorcery.

By the time of Pliny, however, the word *Magus* had lost much of its association with the East. This is well illustrated by a sentence in XVI. § 249: *nihil habent Druidae—ita suos appellant magos—visco et arbore in qua gignatur, si modo sit robur, sacratius*. Mayhoff has here a small “m,” as though to mark that the word in this context is not a proper, but a common noun. Moreover, in § 11 of Book XXX Pliny speaks of a *magices factio a Mose et Ianne et Lotape ac Iudaeis pendens*, words suggesting that *magice* in the first century A.D. included much that would be called to-day thaumaturgy. Incidentally, it may be noticed that in ancient times conjuring was not yet distinguished from “black magic.” It is easier now to separate honest deception from dishonest; in ancient times they were hopelessly confused, as were also legitimate “suggestion” and witchcraft. A sceptical mind would regard all *magice* as fraud, a superstitious mind would accept it all as truly miraculous, and ordinary men were puzzled and uncertain. We can be sure, however, that on the whole credulity outweighed scepticism, as it did until the commonplaces of modern science leavened the popular mind. Witches are no longer burned alive, and those who entertain superstitious beliefs are laughed at. Unless we remember this difference between ancient and modern times we cannot fully appreciate the almost venomous attack of Lucretius on *religio*.

Pliny's mind was of a very ordinary type, and shows much of the uncertainty the ordinary man used to

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feel with regard to the arts of the Magi. He speaks of their *vanitas* and *fraudes*, but nevertheless gives details of their prescriptions and amulets, over sixty of them, in contexts dealing with everyday remedies and medicines. Perhaps the most interesting example of this uncertain attitude occurs in XXVIII. § 85. *id quoque convenit, quo nihil equidem libentius crediderim, tactis omnino menstruo postibus inritas fieri Magorum artes, generis vanissimi.* Pliny would "like to believe" that by merely smearing the door-posts the arts of the Magi, "those arrant quacks," would be "made of no effect." The Magi were a *genus vanissimum*, and yet it would be a good thing to render their *artes* harmless! An *ars* which is not *inrita*, but must be made so, can scarcely be *vanissima*. In several other passages Pliny expresses his strong disapproval of Magism, which he thus dislikes, distrusts, and yet fears.

DRY MEASURES.

Uncia, $\frac{1}{12}$ of a *libra* or *pondus*, about 28 grammes.

Denarius or *drachma*, $\frac{1}{7}$ of an *uncia*, 4 grammes.

Scripulum, $\frac{1}{24}$ of an *uncia*, 1.16 gramme.

Obolus, $\frac{1}{6}$ of a *denarius*, 0.66 gramme.

LIQUID MEASURES.

Sextarius, about $\frac{1}{2}$ litre or 500 c.cm.

Hemina, $\frac{1}{4}$ litre or 250 c.cm.

Acetabulum, $\frac{1}{8}$ *sextarius*, 63 c.cm.

Cyathus, $\frac{1}{12}$ *sextarius*, 42 c.cm.

Pliny, while often giving the size of a dose, very rarely tell us the number of the doses or the interval between each.

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SEASONS, ETC.

The rising of the Pleiades (10 May) marked the beginning of summer. Their setting (11 Nov.) marked the beginning of winter. See II. §§ 123, 125 and XVIII. §§ 222, 223, 225, 248, 309, 313. The rising of Arcturus was "eleven days before the autumnal equinox" (II. § 124), the setting was on 13 May (VIII. § 187).

MANUSCRIPTS AND EDITIONS.

The chief manuscripts for Books XX-XXIII are:—

- F Leidensis, Lipsii n. VII; XI century.
- G Parisinus latinus 6796; XI century or earlier.
- V Leidensis Vossianus fol. n. LXI; XI century or earlier.

G and V (with D) are supposed to have been once one codex.

- d Parisinus latinus 6797; XIII century.

These belong to one family; to the other family belong:—

- E Parisinus latinus 6795; X or XI century.
- R Florentinus Riccardianus, written about A.D. 1100.

x, the better parts of Luxemburgensis (X), a manuscript composed from two sources.

There are, besides these, one or two subsidiary authorities, for which see Mayhoff vol. III. pp. viii-xii.

In the critical notes "*codd.*" signifies that all, or very nearly all, the manuscripts have the reading just given; "*vulg.*" the text of the oldest editions.

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For Book XX the chief MSS. are FdE, with help from V from § 186, and from G (§§ 162-186). For XXI the MSS. are VGdRE to § 161, where E has a gap, and x begins. For XXII we have VdxR to § 65, VdRE to § 71, VGdRE to § 135, VdRE to § 144 and VdE to the end. For XXIII we rely on V, d and E.

For Book XX particularly, but also for some other parts of Pliny, the textual critic is helped by Dioscorides and Theophrastus, but most of all by the *Medicina* of Gargilius Martialis, published, with a book of prescriptions attributed to Plinius Iunior (Secundus), by Valentin Rose in 1875. Both are taken largely from the *Natural History*, or perhaps from its original sources, thus affording evidence that is independent of our MSS. Unfortunately, the prescriptions are not verbal quotations, but paraphrases or summaries, given without naming the sources. Rose's edition was the first to be published, and Detlefsen could make no use of it; Mayhoff tends to attach too much importance to both Plinius Iunior and Gargilius. The first sentence of the former is worth quoting, both because it explains why laymen in antiquity were seriously interested in medicine, and also because it presents some curious parallels to modern patent medicines. "Frequenter mihi in peregrinationibus accidit ut aut propter meam aut propter meorum infirmitatem varias fraudes medicorum experiscerer,^a quibusdam vilissima remedia ingentibus pretiis vendentibus, aliis ea quae curare nesciebant cupiditatis causa suscipientibus."

The value of such excerptors from Pliny for the reconstruction of the text is stressed by D. J. Camp-

^a Sic, with a *v.l. experirer*.

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bell in *Classical Quarterly* for 1932, pp. 116-119. See also L. Thorndike, *Epitomes of Pliny's Natural History in the fifteenth century*, in *Isis* 26 (1936, 7).

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* These are editions. For modern literature on Pliny, see also Bursian, *Jahresbericht*, Band 273 (1941), pp. 1-43.

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BOOK XX

PLINII: NATURALIS HISTORIAE

LIBER XX

I. MAXIMUM hinc opus naturae ordiemur et cibos suos homini narrabimus faterique cogemus ignota esse per quae vivat. nemo id parvum ac modicum existimaverit nominum vilitate deceptus. pax secum in his aut bellum naturae dicitur, odia amicitiae rerum surdarum ac sensu carentium et, quo magis miremur, omnia ea hominum causa, quod Graeci sympathiam et antipathiam appellavere, quibus cuncta constant, ignes aquis restinguentibus, aquas
2 sole devorante, luna pariente, altero alterius iniuria deficiente sidere, atque, ut a sublimioribus recedamus, ferrum ad se trahente magnete lapide et alio rursus abigente a sese, adamantina rarum opum gaudium, infragilem omni cetera vi et invictum, sanguine hircino rumpente, quaeque alia in suis locis dicemus paria vel maiora miratu. tantum venia sit a minimis sed a salutaribus ordienti primumque ab hortensiis.

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BOOK XX

I. FROM this point we are going to deal with a *The kitchen-garden.* most important work of nature, namely to tell man his proper foods, and to force him to acknowledge that his means of living are unknown to him. Nobody should be deceived by the meanness of the names into considering this a petty or trifling task. Herein will be told of Nature at peace or at war with herself, along with the hatreds and friendships of things deaf and dumb, and even without feeling. Moreover, to increase our wonder, all of them are for the sake of mankind. The Greeks have applied the terms "sympathy" and "antipathy" to this basic principle of all things: water putting out fire; the sun absorbing water while the moon gives it birth; each of these heavenly bodies suffering eclipse through the injustice of the other. Furthermore, to leave the more heavenly regions, the magnetic stone draws iron to itself while another kind of stone repels it; the diamond, the rare delight of Wealth, unbreakable and invincible by all other force, is broken by goat's blood. Other marvels, equally or even more wonderful, we shall speak of in their proper place. I only ask pardon for beginning with trivial though healthful objects. First I shall deal with kitchen-garden plants.

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- 3 II. Cucumin silvestrem esse diximus, multo infra magnitudinem sativi. ex eo fit medicamentum quod vocatur elaterium suco expresso semini, cuius causa nisi maturius incidatur, semen exilit oculorum etiam periculo. servatur autem decerptus una nocte, postero die inciditur harundine. semen quoque cinere conditur ad coercendam suci abundantiam, qui expressus suscipitur aqua caelesti atque subsidit, deinde sole cogitur in pastillos ad magnos mortalium usus, obscuritates et vitia oculorum, genarum ulcera. tradunt hoc suco tactis radicibus vitium non attingi uvas ab avibus. radix autem ex aceto cocta podagricis inlinitur sucoque dentium dolori medetur, arida cum resina impetiginem et scabiem quaeque psoram et lichenas vocant, parotidas, panos sanat et cicatricibus colorem reddit, et foliorum sucus auribus surdis cum aceto instillatur.
- 5 III. Elaterio tempestivus est autumnus, nec ullum ex medicamentis longiore aevo durat. incipit a trimatu. si quis recentiore uti velit, pastillos in novo fictili igni lento in aceto domet. melius quo vetustius, fuitque iam cc annis servatum, ut auctor est Theophrastus, et usque ad quinquagesimum annum lucernarum lumina extinguit. hoc enim

* Book XIX. § 74.

^b *Gena* in the sense of "eyelid" is found in Ennius. Propertius and Ovid give it the sense of "eye."

^c See note on § 216 and Introduction, pp. viii-x.

^d Lit. "The cucumber is ripe for elaterium in the autumn." Understand *cucumis* with *tempestivus*.

^e *H.P.* IX. 14 § 1.

BOOK XX. II. 3-III 5.

II. We have said^a that there is a wild cucumber much smaller than the cultivated kind. From it is made the drug called elaterium by pressing the juice out of the seed. Unless, to prepare it, the cucumber be cut open before it is ripe, the seed spurts out, even endangering the eyes. After being gathered, the cucumber is kept for one night and then cut open on the next day with a reed. The seed too is kept in ash to prevent the juice from running away. This when pressed out is received in rain water, where it falls to the bottom. Then it is thickened in the sun, and made into lozenges for the great benefit of mankind, being good for dim vision, eye diseases and sores of the eyelids.^b It is said that if the roots of vines are touched by this juice the grapes are not attacked by birds. The root too when boiled in vinegar is used as ointment in cases of gout, and its juice cures toothache. Dried and mixed with resin it heals impetigo, itch, what are called psora and lichen, parotid swellings and superficial abscesses;^c it restores the natural colour to scars, while the juice of the leaves mixed with vinegar and poured by drops into the ears is a remedy for deafness.

III. The proper season to prepare elaterium is the autumn,^d and no drug keeps for a longer period. It begins to be potent when three years old; if it is desired to use it earlier, the lozenges must be made less harsh by warming them in vinegar in a new clay pot over a slow fire. The older it is the better, and it has been known to keep, so Theophrastus^e tells us, for two hundred years, and its power to put out the flame of a lamp it retains right up to the fiftieth year. Indeed, the test of genuine

Cucumbers.
The
"drier"
purge.

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- veri experimentum est, si admotum prius quam
 6 extinguat scintillare sursum ac deorsum cogat.
 pallidum ac leve herbaceo ac scabro melius ac leniter
 amarum. putant conceptus adiuvari adalligato se-
 mine, si terram non adtigerit, partus vero, si in arietis
 lana alligatum inscientis lumbis fuerit, ita ut pro-
 7 tinus ab enixu rapiatur extra domum. ipsum
 cucumin qui magnificant nasci praecipuum in Arabia,
 mox in Arcadia; Cyrenis alii tradunt similem helio-
 tropio cucumin¹ inter folia et ramos provenire mag-
 nitudine nucis iuglandis, semen autem esse ad
 speciem scorpionum caudae reflexum, sed candidum.²
 8 aliqui etiam scorpionem³ cucumin vocant efficacissimo
 contra scorpionis ictum et semine et elaterio. est⁴
 ad purgandam utrimque alvum modus pro portione
 virium ab dimidio obolo ad solidum, copiosius necat.
 sic et contra phthiriasim bibitur et hydropicis. inlitum
 anginas et arterias cum melle aut oleo vetere sanat.
 9 IV. Multi hunc esse apud nos qui anguinus
 vocetur, ab aliis erraticus, arbitrantur, quo decocto
 sparsa mures non attingunt. idem podagris eum
 et articularibus morbis decoctum in aceto inlinunt
 praesentaneo remedio, lumborum vero dolores se-
 mine sole siccato, dein trito, X xx pondere in

¹ cucumin *Mayhoff*: cui aut cuius *codd.*

² caudae . . . candidum.] *Ita Sillig*: cauda repleta sed candida *codd.*

³ *Post scorpionem add. eum Warmington.*

⁴ est *Mayhoff*: et *codd.*

elaterium is whether its application makes a flame flicker up and down before putting it out. The pale, smooth variety is better than the grass-green and rough, and is slightly bitter. It is thought that conception is aided by cucumber seed if a woman keeps it fastened to her body without its having touched the ground; while labour is easier if, without her knowledge, the seed, wrapped in ram's wool, be tied to her loins; but it must be hastily carried out of the house immediately after delivery. As to this cucumber itself, those who sing its praises *Varieties of cucumber.* tell us that the best variety grows in Arabia, and the next best in Arcadia; some report that in Cyrene grows a cucumber like the heliotrope, of the *Wild cucumber.* size of a walnut, appearing between the leaves and the branches; its seed is curled back like a scorpion's tail but white in colour. Moreover, some call this cucumber "scorpion"; both its seed and elaterium are most effective antidotes to the sting of the scorpion. The regular dose as purge or emetic is from half to one obolus, according to the idiosyncrasy of the patient, a larger dose being fatal. Similar are the doses when taken in drink as a remedy for phthiriasis and dropsy. Mixed with honey or old olive oil it is used to cure quinsy and tracheal affections.

IV. Many authorities hold that this cucumber is the same as that known among us as the serpentine, and by some as the stray cucumber, a decoction of which spread over things prevents mice from touching them. The same authorities say that a decoction of it in vinegar applied externally gives immediate relief to gout and to diseases of the joints; that lumbago is cured by the seed dried in the sun, then pounded, and administered in doses of twenty denarii

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hemina aquae dato sanant, tumores subitos inlito cum lacte mulierum. purgat eas elaterium, sed gravidis abortum facit. suspiriosis prodest, morbo vero regio in nares coniectum. lentigines ac maculas e facie tollit in sole inlitum.

- 10 V. Multi eadem omnia sativis cucumeribus adtribuunt, magni etiam sine iis momenti. namque et eorum semen quantum tres digiti adprehenderint cum cumino tritum potumque in vino tussientibus auxiliatur, et phreneticis in lacte mulieris, et dysintericis acetabuli mensura, purulenta autem expuentibus cum cumino pari pondere. et iocineris vitii in aqua mulsa. urinam movet ex vino dulci, et in renium dolore clysteribus simul cum cumino infunditur.
- 11 VI. Qui pepones vocantur refrigerant maxime in cibo et emolliunt alvum. caro eorum epiphoris oculorum aut doloribus inponitur. radix sanat ulcera concreta in modum favi, quae ceria vocant. eadem concitat vomitiones. siccatur, in farinam tunsa datur quattuor obolis in aqua mulsa, ita ut qui biberit quingentos passus postea ambulet. haec
- 12 farina et in smegmata adicitur. cortex quoque vomitionem movet, faciem purgat. hoc et folia cuiuscumque sativi inlita. eadem cum melle et epinyctidas sanant, cum vino canis morsus, item multipedae; sepa Graeci vocant, oblongam, pilosis

^a Pernicious malaria, that form of it which is characterised by raving and delirium. See pp. xiii-xiv.

^b Honey and water.

^c There are many kinds. See XIX: § 65.

^d Apparently any rash appearing during the night (e.g. through bugs) was so called. See p. viii.

^e Greek σήπω, "I corrupt" (or "rot").

in half a sextarius of water, and that sudden tumours are cured by a liniment made by mixing it with woman's milk. Elaterium promotes menstruation but causes abortion when taken by women with child. It is good for asthma and also for jaundice when injected into the nostrils. Smeared in the sunshine on the face, it removes therefrom freckles and spots.

V. Many authorities assign all these qualities to the cultivated cucumbers, which even apart from them is of great importance. For instance, the seed too, a three-finger pinch of it, when pounded with cummin and taken in wine, is beneficial for coughs, for phrenitis ^a when drunk in woman's milk, a dose of an acetabulum for dysentery, and with an equal weight of cummin for expectoration of pus. Taken in hydromel ^b it is good for diseases of the liver. With sweet wine it is diuretic, while for kidney pain it is used with cummin as an enema.

VI. The gourds called pepones ^c make a very refreshing food, and are also laxative. Their pulp is used as an application for fluxes or pains of the eyes. The root is a cure for the hard sores, like honey-comb, which they call ceria. It also acts as an emetic; it is dried and pounded into flour, the dose being four oboli taken in hydromel, but after it has been drunk a walk of half a mile must be taken. This flour is also used as an ingredient in skin-smoothing cosmetics. The rind too serves as an emetic and clears the face of spots. The leaves also of any kind of cultivated gourd have when applied externally the same effect. The same, mixed with honey, also cure night rash, ^d and mixed with wine dog-bites and the bite of multipedes, an insect called seps ^e by the Greeks. It is rather long, with

*Cultivated
cucumber.*

Pepones.

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pedibus, pecori praecipue nocivam. morsum tumor insequitur et putrescit locus. ipse cucumis odore defectum animi refovet. coctos deraso cortice ex oleo, aceto et melle iucundiores esse certum est.

- 13 VII. Cucurbita quoque silvestris invenitur, *σομφός*. a Graecis appellata, intus ¹ inanis, unde et nomen, digitali crassitudine, non nisi in saxosis nascens. huius conmanducatae sucus stomacho admodum prodest.

- 14 VIII. Colocynthis vocatur alia, ipsa plena semine, sed minor quam sativa. utilior pallida quam herbacea. arefacta per se inanit alvum. infusa quoque clysteribus intestinorum omnibus vitiis medetur et renium et lumborum et paralyti. eiecto semine aqua mulsa in ea decoquitur ad dimidias, sic tutissimo

- 15 infunduntur oboli quattuor. prodest et stomacho farinae aridae pilulis cum decocto melle sumptis. in morbo regio semina eius vii sumuntur et protinus aqua mulsa. carnes eius cum absinthio ac sale dentium dolorem tollunt, sucus vero cum aceto calefactus mobiles sistit. item spinae et lumborum ac coxendicum dolores, cum oleo si infricetur. praeterea, mirum dictu, semina eius si fuerint pari numero in linteo adalligata febribus liberare dicuntur
- 16 quas Graeci periodicas vocant. Sativae quoque derasae sucus tepefactus auribus medetur, caro eius interior sine semine clavis pedum et suppurationibus

¹ intus *om.* fere omnes *codd.*

^a *I.e.* three for tertians, four for quartans.

hairy legs, and is particularly harmful to cattle. The bite is followed by swelling, the wound suppurating. The cucumber itself by its smell revives those who have fainted. When peeled and cooked in oil, vinegar and honey, cucumbers are, it is firmly held, more pleasant to the taste.

VII. There is also found a wild gourd, called by *σμφός*, the Greeks *σμφός*, hollow inside (whence its name), of the thickness of a finger, growing only in rocky soils. If it be chewed the juice is very beneficial to the stomach.

VIII. Another kind of wild gourd is called *Colocynthis*. The fruit is smaller than the cultivated, and full of seed. The pale variety is more useful than the grass-green. Taken by itself when dried it is a drastic purge. Used also as an enema an injection is a remedy for all complaints of the bowels, of the kidneys, and of the loins, as well as for paralysis. After the seed has been picked out, hydromel is added and boiled down to one half, which gives a very safe strength for an injection of four oboli. The stomach is benefited also by taking pills made of the dry powder mixed with boiled honey. In jaundice seven seeds of it are taken, to be followed immediately by hydromel. The pulp added to wormwood and salt cures toothache, while its juice warmed with vinegar makes loose teeth firm. Rubbed on with oil it likewise relieves pains of spine, loins and hips. Moreover, wonderful to relate, an equal number of its seeds, fastened to the body in a cloth, is said to reduce those fevers which the Greeks call periodic. The warmed juice, also, of the shredded cultivated *colocynthis* cures ear-ache, and its inner pulp without the seed corns on the feet, as well as

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- quae Graeci vocant ἀποστήματα. decoctae autem universae sucus dentium motus stabilit et dolores inhibet, vinum cum ea fervefactum oculorum etiam impetus. folia eius cum recentibus cupressi contusa et inposita, ipsa quoque tosta in argilla ac
- 17 trita cum adipe anseris vulneribus medetur. nec non ramentis corticis recens podagras refrigerat, et ardores capitis, infantium maxime, et ignes sacros vel isdem strigmentis inpositis vel seminibus. sucus ex strigmentis inlitus cum rosaceo et aceto febrium ardores refrigerat. aridae cinis inpositus mire combusta sanat. Chrysippus medicus damnabat eas in cibis, sed omnium consensu stomacho utilissimae iudicantur et interaneorum vesicarumque exulcerationibus.
- 18 IX. Est et rapo vis medica. perniones fervens inpositum sanat, item frigus pellit e pedibus. aqua decocti eius fervens podagris etiam frigidis medetur, et crudum tusum cum sale cuicumque vitio pedum. semen inlitum et potum in vino contra serpentes et toxica salutare esse proditur, a multis vero antidoti
- 19 vim habere in vino et oleo. Democritus in totum ea abdicavit in cibis propter inflationes, Diocles magnis laudibus tulit, etiam venerem stimulari ab iis professus, item Dionysius, magisque si eruca condirentur, tosta quoque articulorum dolori cum adipe prodesse.

^a For *impetus* in the sense of inflammation, see p. 272.

^b Possibly shingles; see Introduction, p. x.

^c There is some doubt about the identification of the various kinds of *rapum* (*rapa*) and *napus*.

the suppurations called by the Greeks ἀποστήματα. The juice obtained by boiling down the whole pulp along with the seeds makes loose teeth firm and stops toothache, and a boiled mixture of it with wine stops inflammation^a of the eyes. An application of the pounded leaves with fresh cypress leaves, or of the fruit alone, roasted in a clay pot, reduced to powder and added to goose grease, is a cure for wounds. Moreover, when fresh, with shreds of its bark it cools gout and inflammations of the head, especially of babies, and erysipelas^b by the application to the part affected of the same shreds, or of the seeds. The juice from scrapings, mixed with rose-oil and vinegar, makes a liniment which cools the heat of fevers. The dust of the dried fruit applied to burns is wonderfully healing. Chrysippus the physician disapproved of gourds as food, but there is a general agreement that they are very beneficial to the stomach, and also for ulceration of the intestines and bladder.

IX. The turnip^c too has its medicinal properties. A hot application cures chilblains, besides preventing the feet from being chilled. A hot decoction of it is good even for cold gout, and raw turnip, pounded and mixed with salt, for every ailment of the feet. The seed, made into liniment or drunk in wine, is said to protect against snake bites and poisons; many moreover hold that taken in wine and oil it serves as an antidote. Democritus entirely disapproved of the turnip as a food on the ground that it causes flatulence; Diocles, however, praised it highly, maintaining that it is also aphrodisiac. Dionysius agrees, holding that its effect is greater when it is seasoned with rocket, and that, when roasted and made into an ointment with grease, it is good for pain in the joints.

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- 20 X. Silvestre rapum in arvis maxime nascitur, fruticosum, semine candido, duplo maiore quam papaver. hoc ad levigandam cutem in facie totoque corpore utuntur mixta farina pari mensura ervi, hordei et tritici et lupini. radix ad omnia inutilis.
- 21 XI. Naporum duas differentias et in medicina Graeci servant. angulosis foliorum caulibus, flore aneti, quod bunion vocant purgationibus feminarum et vesicae et urinae utile decoctum, potum ex aqua mulsa vel suci drachma, semen dysintericis tostum tritumque in aquae calidae cyathis quattuor. sed urinam inhibet, si non lini semen una bibatur. alterum genus buniada appellant et raphano et rapo simile, seminis praeclari contra venena. ob id et in antidotis utuntur illo.
- 22 XII. Raphanum et silvestrem esse diximus. laudatissimus in Arcadia, quamquam et alibi nascitur, utilior urinae dumtaxat ciendae, cetero aestuosus. in Italia et armoraciam vocant.
- 23 XIII. Et sativi vero praeter ea quae circa eos dicta sunt stomachum purgant, pituitam extenuant, urinam concitant, bilem detrahunt. praeterea cortices in vino decocti mane poti ad ternos cyathos comminuunt et eiciunt calculos. iidem in posca
- 24 decocti contra serpentium morsus inlinuntur. ad tussim etiam mane ieiunis raphanus prodest¹ cum
- ¹ raphanos prodest esse *Mayhoff*.

^a XIX. § 82. It is the horse-radish.

^b With Mayhoff's reading: "It is good for a cough to eat radishes, etc."

X. Wild turnip grows chiefly in fields; it is bushy, with a white seed, which is twice as big as that of the poppy. For smoothing the skin of the face or of the whole body it is used when mixed with equal parts of the meal of vetches, barley, wheat and lupins. The root is not good for anything.

XI. The Greeks retain in pharmacology also two *Navews.* varieties of navews. The one with angular leaf-stalks, and a flower like that of dill, called bunion, is beneficial for the purgings of women, for the bladder and for the urine, in the form of a decoction, drunk in hydromel, or in a drachma of the juice; the seed, roasted and ground, taken in four cyathi of warm water, is good for dysentery. It checks urine, however, if a linseed drink be not taken with it. The other kind of navew is called bunias; it is like the radish and turnip, its seed being a splendid remedy for poisons, for which reason it is also used in antidotes.

XII. We have said^a that there is also a wild *Radishes of various kinds.* radish. The most popular kind is found in Arcadia, although it also grows elsewhere. It is rather useful as a diuretic. This is its only merit, for in other respects it is heating. In Italy it is also called armoracia.

XIII. Cultivated radishes moreover, besides what has been said about them, purge the stomach, loosen phlegm, promote urine and bring away bile. In addition, a decoction of the skin in wine, drunk in the morning up to three cyathi, break up and eliminate gall-stones. A decoction of the same in vinegar and water is used as liniment for the bites of serpents. The radish too is good for a cough^b if taken with honey in the morning on an empty

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- melle, semen eorum tostum ipsumque conmanducatum, adligato raphano aquam foliis eius decoctis bibere vel sucum ipsius cyathis binis contra phthirias, phlegmoni ipsos inlinere tusos, livori vero recenti corticem cum melle, veteriosis autem quam acerrimos mandere, semenque tostum, dein contri-
- 25 tum cum melle suspiriosis. iidem et contra venena prosunt, cerastis et scorpionibus adversantur,—vel ipso vel semine infectis manibus inpune tractaveris, inpositoque raphano scorpiones moriuntur—salutares et contra fungorum aut hyoscyami venena atque, ut Nicander tradit, et contra sanguinem tauri. contra viscum quoque dari Apollodori duo iubent, sed Citieus semen ex aqua tritum, Tarentinus sucum. lienem item extenuant, iocineri prosunt et lumborum doloribus, hydropicis quoque ex aceto aut sinapi sumpti et lethargicis et comitialibus et melancholicis.
- 26 Praxagoras et iliosis dandos censet, Plistonicius et coeliacis. intestinorum etiam ulcera sanant ac purulenta praecordiorum, si cum melle edantur. quidam ad haec coquere eos in luto¹ malunt, sic et feminas purgari. ex aceto aut e melle sumpti intes-

¹ luto inlitos *Mayhoff*: in luto inlitos *codd*.

^a *I.e.* "horned viper."

^b Nicander, *Alex.* 330, 430, 527.

^c For melancholia see §§ 65, 93 and note on § 227; for lethargus see Introduction, p. xiv.

^d A severe kind of colic. See Celsus IV. 20, 1.

^e A disease of the bowels. See Celsus IV. 19, 1.

^f *Praecordia* may mean: (1) the chest; (2) the region over the diaphragm; (3) the two hypochondria in the upper abdomen below the ribs. Here the first meaning is most likely, as "ulcers of the intestines" have just been mentioned.

stomach; its seed too when roasted and chewed by itself. To use a radish as an amulet and to drink either a decoction of its leaves in water or its juice neat in doses of two cyathi is good for phthiriasis. Good for inflammation is a liniment of radishes crushed by themselves, and for a fresh bruise a liniment made from the skin with honey. Lethargic persons are benefited by eating them at their hottest, asthmatics by the seed, first roasted and then beaten up with honey. Radishes are also useful for poisons, counteracting the sting of the cerastes^a and of the scorpion. With hands rubbed with radish or its seed you may handle these creatures without fear, and a radish placed on scorpions kills them. Radishes too counteract the poisons of fungi and of henbane, and moreover, as Nicander^b tells us, the effects of drinking bull's blood. Both the physicians with the name of Apollodorus prescribe radishes to be given for mistletoe poisoning; but Apollodorus of Citium recommends the pounded seed in water, he of Tarentum the juice. Radishes also reduce the size of the spleen, and are good for the liver and pains in the loins; taken also with vinegar or mustard they are beneficial in cases of dropsy, lethargus, epilepsy and melancholia.^c Praxagoras would administer it to patients with iliac,^d and Plistonicus to those with coeliac disease.^e If eaten with honey they also cure ulcers of the intestines and suppurations of the chest.^f Some for these purposes prefer to cook them in mud;^g if so taken they promote, according to them, the menstrual discharge. Taken with vinegar or honey they bring away

^g With Mayhoff's reading: "to smear them over with mud before cooking."

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- tinorum animalia detrahunt, iidem ad tertias decocto eorum poto cum vino enterocelicis prosunt, san-
 27 guinem quoque inutilem sic extrahunt. Medius ad haec et sanguinem excreantibus coctos dari iubet, et puerperis ad lactis copiam augendam, Hippocrates capitis mulierum defluvia perfricari raphanis, et super umbilicum inponi contra tormenta vulvae. reducunt et cicatrices ad colorem. semen quoque ex aqua inpositum sistit ulcera quae phagedaenas
 28 vocant. Democritus venerem hoc cibo stimulari putat, ob id fortassis voci nocere aliqui tradiderunt. folia quae in oblongis dumtaxat nascuntur, excitare oculorum aciem dicuntur, ubi vero acrior raphani medicina admota sit, hysopum dari protinus imperant. haec antipathia est. et aurium gravitati sucum raphani instillant. nam vomituris summo cibo esse eos utilissimum est.
- 29 XIV. Pastinacae simile hibiscum, quod molochen agrian vocant et aliqui *πλειστολοχείαν*, ulceribus, cartilagini, ossibus fractis medetur. folia eius ex aqua pota alvum solvunt, serpentes abigunt, apium, vesparum, crabronum ictibus inlita medentur. radicem eius ante solis ortum erutam involvunt lana coloris quem nativum vocant, praeterea ovis quae feminam peperit, strumisque vel suppuratis alligant. quidam ad hunc usum auro effodiendam censent,

^a *I.e.* extravasated.

^b See Introduction, p. x.

^c This is a Plinian use of *nam*.

^d See p. 128, n. b.

intestinal worms; a decoction of them boiled down to one third, drunk with wine, is good for intestinal hernia; so taken they draw off superfluous^a blood. For these purposes and for spitting of blood Medius prescribes that they should be given cooked, as well as to women lying-in to increase the supply of milk; Hippocrates that radishes should be rubbed on the head of women when the hair falls off, and that they should be placed on the navel for pains in the womb. They also bring scars back to the original colour of the skin. An application also of the seed soaked in water arrests ulcers called phagedaenae.^b Democritus thinks that as a food radishes are aphrodisiac; for this reason, perhaps, some have maintained that they are injurious to the voice. The leaves, but only those of the long radish, are said to improve the eyesight; should however too strong a dose of radish be applied as a remedy, they prescribe the immediate use of hyssop, for it is antipathetic. For deafness the juice of the radish is dropped into the ear. But,^c for those who would vomit, it is very useful to eat radishes after a meal.

XIV. Like the parsnip is the hibiscum, which some call the wild mallow, and others *πλειστολοχεία*; ^a *Marsh mallow*. it is a cure for ulcers and for broken cartilages and bones. The leaves, taken in water, relax the bowels; they keep serpents away, and used as a liniment heal the stings of bees, wasps and hornets. Its root dug up before sun-rise is wrapped in wool of the colour called "natural," taken moreover from a ewe that has given birth to a ewe lamb, and bound on scrofulous sores, even when they have suppurated. Some think that when it is to be used for this purpose the root should be dug up with a tool of gold, care

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cavendumque ne terram adtingat. Celsus et podagris quae sine tumore sint radicem eius in vino decoctam inponi iubet.

- 30 XV. Alterum genus est staphylinus, quod pastinacam erraticam vocant. eius semen contritum et in vino potum tumentem alvum et suffocationes mulierum doloresque lenit in tantum ut vulvas corrigat, inlitum quoque e passo ventri earum prosit; et viris vero prosit cum panis portione aequa tritum ex vino potum contra ventris dolores. pellit et urinam, et phagedaenas ulcerum sistit recens cum melle in-
- 31 positum vel aridum farinae inspersum.¹ radicem eius Dieuches contra iocineris ac lienis ac lumborum et renium vitia ex aqua mulsa dari iubet, Cleophrantus et dysintericis veteribus. Philistio in lacte coquit et ad stranguriam dat radicis uncias quattuor, ex aqua hydropicis, similiter et opisthotonicis et pleuriticis et comitialibus. habentes eam feriri a serpentibus negantur, aut qui ante gustaverint non laedi. percussis inponitur cum axungia, folia contra
- 32 cruditates manduntur. Orpheus amatorium inesse staphylini dixit, fortassis quoniam venerem stimulari hoc cibo certum est. ideo conceptus adiuvari aliqui prodiderunt. ad reliqua et sativa pollet. efficacior tamen silvestris magisque in petrosis nata. semen sativae quoque contra scorpionum ictus ex vino aut

¹ aridae farina (aut -e) inspersum (aut -am) codd.: arida farina inspersa Mayhoff: sed vide Campbell, *Classical Quarterly*, 1932, p. 119.

^a IV. 31, § 4.

^b For *inspergo* with dative see XIX. 53. With Mayhoff's reading: "dry flour having been sprinkled on it."

being taken not to let it touch the ground. Celsus^a too prescribes a decoction of the root in wine as a liniment for cases of gout without swelling.

XV. Another kind is *staphylinus*, which they call stray parsnip. Its seed, crushed and taken in wine, soothes a swollen belly, and the hysterical chokings and pains of women, to such an extent that it restores the womb to normal, benefits their abdomen, moreover, if applied in raisin wine, benefiting men also when pounded with an equal part of bread and drunk in wine as a cure for belly-ache. It is diuretic also, and if applied fresh with honey, or after being sprinkled dry on flour,^b it stays phagedaenic ulcers. Its root, taken in hydromel, *Dieuches* prescribes against affections of the liver, spleen, loins and kidneys; *Cleopantus* in cases also of chronic dysentery. *Philistion* boils it in milk; for strangury he prescribes four ounces of the root, giving it in water for dropsy, likewise for those stricken by *opisthotonic*^c tetanus, pleurisy and epilepsy. It is said that those who carry it are not bitten by serpents, and that those who have eaten of it, if bitten, receive no hurt; for bites it is applied with axle-grease, and its leaves are chewed as a remedy for indigestion. *Orpheus* said that there is in *staphylinus* a love-philtre, perhaps because it is a proved fact that when eaten it is an aphrodisiac; for which reason some have declared that by it conception is aided. For all other purposes the cultivated kind too is powerful, but the wild plant is more efficacious, especially that growing on rocky soils. The seed of the cultivated kind too is a cure for the sting of

^c The form of tetanus when the sufferer rests on his heels and the back of his head. See pp. xi and 368, n. a.

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posca salutare est. radice eius circumscalpti dentes dolore liberantur.

- 33 XVI. Syria in hortis operosissima, unde quoque in proverbium ¹ Graecis multa Syrorum olera. similimam staphylino herbam serit quam alii gingidion vocant, tenuius tantum et amarius eiusdemque effectus. estur coctum crudumque stomachi magna utilitate, siccatur enim ex alto omnes eius umores.

- 34 XVII. Siser erraticum sativo simile est et effectus: stomachum excitat, fastidium absterget ex aceto laserpicato sumptum aut ex pipere et mulso vel ex garo. urinam ciet, ut Ophion credit, et venerem. in eadem sententia est et Diocles, praeterea cordi convenire convalescentium aut post multas vomitiones perquam utile. Heraclides contra argentum vivum dedit, et veneri subinde offensanti ² aegrisque se recolligentibus. Hicesius ideo stomacho inutile videri dixit, quoniam nemo tres siseres edendo continuaret, esse tamen utile convalescentibus ad vinum transeuntibus. sativi privatim sucus cum lacte caprino potus sistit alvum.

- 36 XVIII. Et quoniam plerosque similitudo nominum Graecorum confundit, conteximus et de sili, sed hoc est vulgatae notitiae.³ optimum Massiliense, lato enim grano et fulvo est, secundum Aethiopicum

¹ unde quoque in proverbium *Detlefsen*: undique in proverbium *codd.* *Mayhoff* *coni.* utique in proverbio. *Pro* undique *Warmington* *coni.* unde venit vel unde abiit.

² venerem subinde offensantem *Mayhoff*: veneri et offensantem *codd.*

³ sed . . . notitiae *uncis incl. Mayhoff.*

^a See pp. 364 ff.

scorpions when taken in wine or vinegar and water. Its root used as a dentifrice is a cure for tooth-ache.

XVI. In Syria very great pains are taken over kitchen-gardens; hence the Greek proverb: "Syrians have plenty of vegetables." They sow a vegetable called by some gingidion that is very like staphylinus, only it is slighter and more bitter, though its properties are the same. It is eaten, cooked or raw, with great advantage to the stomach, for it dries up all its humours, however deep these may lie.

XVII. Wild (or stray) skirret is like the cultivated kind and has similar properties. It stimulates the appetite, banishing distaste for food, if taken in vinegar and silphium,^a or with pepper and honey wine, or if you like with fish sauce. It is both diuretic, as Ophion believes, and an aphrodisiac. Diocles too is of the same opinion, and moreover thinks that it acts as a cordial in convalescence, or is very useful after many vomitings. Heraclides prescribed it for mercury poisoning, for occasional impotence and in convalescence. Hicesius said that the reason why it appeared to be harmful to the stomach was that no one could eat three skirrets in succession; adding however that it was beneficial to convalescents who are beginning to take wine again. The juice, especially of the cultivated variety, checks looseness of the bowels if drunk with goats' milk.

XVIII. Since most people confuse the two similar Greek names, *σίσαρον* and *σέσελι* (*σίλι*), we have added some account of sili or hartwort, though it is a plant generally known. The best is that of Massilia, for its seed is broad and yellow; the next best, the Aethiopian, is darker, and the Cretan has the

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- nigrius, Creticum odoratissimum omnium. radix iucundi odoris est. semen esse et vultures dicuntur. prodest homini ad tussim veterem, rupta, convulsa in vino albo potum, item opisthotonicis et iocinerum vitiis et torminibus et stranguriae duarum aut trium
- 37 lingularum mensura. sunt et folia utilia, ut quae partus adiuvent etiam quadripedum. hoc maxime pasci dicuntur cervae pariturae. inlinuntur et igni sacro, multumque in summo cibo concoctionibus confert, vel folio vel semine. quadripedum quoque alvum sistit sive tritum potui infusum sive mandendo commanducatum. e sale boum morbis medetur vel si tritum infunditur.¹
- 38 XIX. Inula quoque a ieiunis commanducata dentes confirmat. si eruta est, ut² terram non adtingat, condita tussim emendat, radiceis vero decoctae sucus taenias pellit, siccatae autem in umbra farina tussi et convulsis et inflationibus et arteriis medetur. venenatorum morsus abigit. folia ex vino lumborum dolori inlinuntur.
- 39 XX. Cepae silvestres non sunt. sativae olfactu ipso et delacrimatione caligini medentur, magis vero suci inunctione. somnum etiam facere traduntur et ulcera oris sanare commanducatae cum pane, et canis morsus virides ex aceto inlitae aut sicca cum melle³ et vino, ita ut post diem tertium solvantur: sic et trita sanant. coctam in cinere et epiphoris

¹ commendatum sale. boum morbis sic tritum infunditur *Mayhoff*.

² si eruta est, ut *Detlefsen*: si, ut eruta est *Mayhoff*, si ut eruta est et *codd*.

³ *Post cum melle lacunam esse putat Mayhoff.*

^a With *Mayhoff's* reading: "or flavoured with salt when they eat it. So pounded it is injected for diseases of cattle." *Infunditur* may mean, "is mixed with their drink."

strongest smell of all. The root has a pleasant smell, and the seed, it is said, even the vultures eat. When drunk in white wine it is beneficial to man for chronic cough, ruptures and convulsions; likewise for opisthotonic tetanus, affections of the liver, colic and strangury, in doses of two or three spoonfuls. The leaves also are useful because they aid parturition, even that of quadrupeds; it is said that does, when about to give birth, make this their special food. The leaves are also applied to erysipelas, and digestion is much helped if the leaf or seed be eaten after food. It arrests also looseness of bowels in quadrupeds, either pounded and mixed with their drink, or chewed up when they eat their food. It acts as a cure for diseases of oxen, if taken with salt or pounded and injected.^a

XIX. Elecampane too chewed by people fasting *Elecampane.* strengthens the teeth. If it is taken from the ground so as not to touch it, a confection of it is healing for a cough; the juice moreover of the boiled root expels worms, and dried in the shade its powdered form cures cough, convulsions, flatulence and affections of the trachea. It keeps off the bite of poisonous creatures. An application of the leaves steeped in wine is used for lumbago.

XX. There are no wild onions. Cultivated onions, *Onions.* by the running caused by the mere smell, is a cure for feebleness of vision; an even better cure is to apply to the eye some of the juice. Onions are also said to induce sleep, and chewed with bread to heal sores in the mouth; fresh onions applied in vinegar, or dry with honey and wine, dog-bites, provided that the bandage is taken off three days after. Applied in the same way they also heal abrasions. An onion

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- multi inposuere cum farina hordeacia et genitalium
 40 ulceribus. suco et cicatrices oculorum et albugines
 et argema inunxere, et serpentium morsus et omnia
 ulcera cum melle, item auricularum¹ cum lacte
 mulierum, et in isdem sonitum aut gravitatem
 emendantes cum adipe anserino aut cum melle
 stillavere. et ex aqua bibendum dederunt repente
 41 obmutescensibus. in dolore quoque ad dentes
 conluendos instillavere et plagis bestiarum omnium,
 privativam scorpionum. alopecias fricuere et psoras
 tusis cepis. coctas dysintericis vescendas dedere
 et contra lumborum dolores, purgamenta quoque
 earum cremata in cinerem inlinentes ex aceto ser-
 pentium morsibus, ipsasque multipedae ex aceto.
 42 Reliqua inter medicos mira diversitas. proximi in-
 utiles esse praecordiis et concoctioni, inflationemque
 et sitim facere dixerunt. Asclepiadis schola ad
 colorem quoque validum profici hoc cibo et, si ieiuni
 cotidie edant, firmitatem valetudinis custodiri,
 43 stomacho utiles esse, spiritus agitatione ventrem
 molliore, haemorrhoidas pellere² subditas pro balanis,
 sucum cum suco feniculi contra incipientes hydropises
 mire proficere, item contra anginas cum ruta et melle,
 excitari eadem lethargicos. Varro quae sale et
 aceto perfusa³ est arefactaque vermiculis non infestari
 auctor est.

¹ *Mayhoff lacunam indicat Dioscoridem secutus.*

² *pellere vulg. : aperire Mayhoff (ex Diosc.) : appellere codd.*

³ *perfusa Dellefsen : pisa codd. : pista Mayhoff, qui tamen condita malit.*

⁴ *An eye-disease of which unnatural whiteness is a symptom.*

⁵ *An eye-disease of which a white speck on the black of the eye is a symptom. Diseases of the eyes were very common*

cooked in ash many have applied with barley flour to fluxes of the eyes, and to sores of the genitals. The juice of onions they used as ointment for eye-sores, albugo^a and argema,^b with honey for serpent bites and all kinds of ulcers, with woman's milk for sore ear-laps, and dropped it into them with goose grease or honey for ringing or hardness of hearing. Diluted with water it was prescribed for those suddenly smitten with dumbness. In toothache it was poured by drops into the mouth to rinse the teeth; likewise on to wounds made by any wild beasts, especially to those of scorpions. In mange and itch crushed onions have been rubbed on the places affected. Boiled onions were given to eat to those affected by dysentery or lumbago; onion-peelings burnt to ash were applied in vinegar to serpent bites, and onions themselves in vinegar for those of the multipede. Apart from what has been said, there are remarkable differences of opinion among physicians. The latest opinion holds that they are injurious to the viscera and the digestion, causing, it is said, flatulence and thirst. The school of Asclepiades holds that, used as food, onions promote a healthy complexion, and, if they are eaten daily on an empty stomach, preserve a good state of health, are useful to the stomach, loosen the bowels by putting the air in motion, disperse haemorrhoids when used as a suppository, and the juice, added to that of fennel, is very beneficial in cases of incipient dropsy; added to rue and honey it is used for quinsy, and for dispelling lethargus. Varro is our authority that an onion steeped in salt and vinegar, and then dried, is not attacked by worms.

in antiquity, being largely due to infected dust. See pp. viii-x.

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- 44 XXI. Porrum sectivum profluvia sanguinis sistit naribus contrito eo obturatis, vel gallae mixto aut mentae, item ex abortu profluvia poto suco cum lacte mulieris.¹ tussi etiam veteri et pectoris ac pulmonis vitiis medetur. inlitis foliis sanantur vari et ambusta et epinictides—ita vocatur ulcus, quae et syce, in angulo oculi perpetuo umore manans; quidam eodem nomine appellant pusulas liventes ac noctibus in-
- 45 quietantes—et alia ulcera cum melle tritis,² vel bestiarum morsus ex aceto, item serpentium aliorumque venenatorum, aurium vero vitia cum felle caprino vel pari mensura mulsi, stridores cum lacte mulieris, capitis dolores, si in nares fundatur, dormiturisve in aures duobus suci coclearibus, uno mellis.
- 46 sucus et ad serpentium scorpionumque ictum bibitur cum mero et ad lumborum dolorem cum vini hemina potus. sanguinem vero excreantibus et phthisicis et destillationibus longis vel sucus vel ex ipso cibus prodest, item morbo regio vel hydropicis et ad renum dolores, cum tisanæ suco acetabuli mensura. idem
- 47 modus cum melle vulvas purgat. estur vero et contra fungorum venena, inponitur et vulneribus, venerem stimulat, sitim sedat, ebrietatem discutit, sed oculorum aciem hebetare traditur, inflationes quoque facere quae tamen stomacho non noceant ventremque molliant. voci splendorem adfert.

¹ *Non post mulieris sed post suco dist. V. Rose.*

² tritis *Mayhoff*: trito *codd.*

* Apparently caused by fleas or bugs.

XXI. Cutleek stops bleeding at the nose if the *Leeks.* nostrils be plugged with leek pounded, or mixed with gall-nut or mint; fluxes also after miscarriage are arrested by drinking the juice with woman's milk. It cures chronic cough, and affections of the chest and lungs. By an application of the leaves are healed pimples, burns and epinyctis—so is called a sore, also known as syce, in the corner of the eye and perpetually running; some give the same name to livid pustules causing restlessness at night^a—and other sores by leeks pounded with honey; the bites of beasts are treated by leek in vinegar, as are those of serpents and other poisonous creatures. Affections of the ears, however, are treated by leeks and goats, gall, or else leeks and mead in equal proportions. With woman's milk leeks are used for singing in the ears; for headache the juice is poured into the nostrils, or two tablespoons of juice with one of honey are poured into the ears at bedtime. The juice also is drunk with neat wine to counteract the bites of serpents and of scorpions, and a draught can be taken with half a sextarius of wine for lumbago. For spitting of blood, moreover, for consumption, and for chronic catarrhs the juice is beneficial, as is also the leek by itself eaten as food; for jaundice, dropsy and kidney pains an acetabulum of the juice mixed with barley-water. The same dose taken with honey purges the womb. Leek moreover is eaten to counteract the poisons of fungi; it is applied to wounds, is an aphrodisiac, quenches thirst, serves as a pick-me-up after drunkenness, but is said to dim the eye-sight, and to cause flatulences which do no harm, however, to the stomach but relax the bowels. Leeks impart brilliance to the voice.

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- 48 XXII. Capitato porro maior ad eadem vis est.¹
sanguinem reicientibus sucus eius cum gallae² aut
turis farina vel acacia datur. Hippocrates et sine
alia mixtura dari iubet vulvasque contractas aperire
se putat, fecunditatem etiam feminarum hoc cibo
49 augeri. contritum ex melle ulcera purgat. tussim
et destillationes thoracis, pulmonis et arteriae vitia
sanat, datum in sorbitione tisanæ vel crudum præter
capita sine pane, ita ut alternis diebus sumatur, vel
si pura excreentur. sic et voci et veneri somnoque
multum confert. capita bis aqua mutata cocta
alvum sistunt et³ fluctiones veteres, cortex decoctus
inlitusque inficit canos.
- 50 XXIII. Alio magna vis, magnæ utilitatis contra
aquarum et locorum mutationes. serpentes abigit et
scorpiones odore atque, ut aliqui tradidere, bestias
omnes.⁴ ictibus medetur potu vel cibo vel inlitu,
privatim contra hæmorrhoidas cum vino redditum
vomitu. ac, ne contra araneorum murium venena-
tum morsum valere miremur, aconitum, quod alio
nomine pardalianches vocatur, debellat, item hyo-
scyamum, canum morsus, in quæ vulnera cum melle
51 inponitur. ad serpentium quidem ictus tostum⁵ cum
restibus suis efficacissime ex oleo inlinitur, adtri-

¹ porro maior ad eadem vis est *Dellefsen*: maiores ad eadem effectus *Mayhoff*: maiores ad eadem effectum *plurimi codd.*

² gallae *codd*: galla *V. Rose*.

³ sistunt et *Dellefsen*: emolliunt . . . sistit *Mayhoff*, qui ex *Gargilio* eadem aqua pota cum vino in lacunam inserit; sistit *T*: sistunt *vulg.*

⁴ Ita *dist. Mayhoff*.

⁵ tostum *V. Rose*: potum *codd.*

^a A poisonous snake; see *Lucan IX. 709, 806*. The acc. pl. of *hæmorrhôis* not of *hæmorrhôida*.

XXII. Headed leek has the same properties as cutleek, but they are stronger. Those who spit blood are given its juice along with ground gall-nut or frankincense, or with gum arabic. Hippocrates directs it also to be given without other ingredient, and is of opinion that a contracted womb opens under its influence; likewise that by its use as food the fertility of women is increased. Beaten up, with honey added, it cleanses sores. Cough, catarrh of the chest, and affections of the lungs and of the trachea are cured by it when given in a draught of barley-water or eaten raw, the head excepted, without bread; it must however be taken only on alternate days, even if pus be expectorated. Given thus it greatly benefits the voice, venery and sleep. The heads, boiled in water that is twice changed checks diarrhoea and chronic fluxes; a decoction of the skin serves as a dye for grey hair.

XXIII. Garlic has powerful properties, and is of *Garlic.* great benefit against changes of water and of residence. It keeps off serpents and scorpions by its smell, and, as some have maintained, every kind of beast. It cures bites when drunk or eaten, or applied as ointment, being particularly efficacious against the haemorrhoids ^a when taken with wine and brought up by vomiting. Lest we be surprised that it is an antidote against the poisonous bite of the shrew-mouse, it neutralizes aconite, which is also known by the name of pardalianches,^b as well as henbane and dog-bites; for the wounds of the latter it is made into an ointment with honey. For the bites of serpents it is very efficacious to roast it with its own leaves and make a liniment by adding oil; also for

^b "Panther-strangler."

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tisque corporum partibus, vel si in vesicas intumuerint. quin et suffitu eo evocari secundas partus existimat Hippocrates, cinere eius cum oleo capitis
 52 ulcera manantia sanitati restituens. suspiriosis coctum, aliqui crudum id dedere, Diocles hydropicis cum centaurio aut in fico duplici ad evacuandam alvum, quod efficacius praestat viride cum coriandro in mero potum, suspiriosis aliqui et tritum in lacte dederunt. Praxagoras et contra morbum regium vino miscuit et contra ileum in oleo et pulte, sic inlinens strumis quoque. antiqui et insanientibus dabant
 53 crudum, Diocles phreneticis elixum. contra anginas tritum in posca gargarizari prodest. dentium dolorem tribus capitibus in aceto tritis inminuit, vel si decocti aqua conluantur addaturque ipsum in cava dentium. auribus etiam instillatur sucus cum adipe anserino. phthiriasis et porrigines potum, item infusum cum aceto et nitro conpescit; destillationes cum lacte coctum vel tritum permixtumve caseo molli, quo genere et raucitatem extenuat vel in pisi aut
 54 fabae sorbitione. in totum autem coctum utilius est crudo elixumque tosto. sic et voci plus confert. taenias et reliqua animalia interaneorum pellit in aceto mulso coctum, tenesmo in pulte medetur, temporum doloribus inlinitur elixum, et pusulis coctum, deinde cum melle tritum, tussi cum adipe vetusto decoctum vel cum lacte aut, si sanguis etiam

^a Colic of a severe kind.

^b It is hard to decide whether *phreneticus* here means "raving" generally, or whether it refers to the mad delirium of *phœvîris*, a virulent form of malaria attended with delirium. As *insanientibus* occurs in the previous sentence (= mad generally), the second meaning is more probable here.

^c Honey and vinegar.

bruises on the body, even if they have swollen into blisters. Moreover, Hippocrates thinks that garlic fumigations bring away the after-birth; by its ash mixed with oil he used to restore to health running sores on the head. To asthmatics it is given cooked, though some have given it raw. Diocles prescribed it with centaury for dropsy, or in a split fig as a purge, a more efficient one being fresh garlic taken in neat wine with coriander; pounded garlic too has by some been given in milk to asthmatics. Praxagoras again mixed it with wine as a remedy for the jaundice, and with oil and pottage for iliac passion^a; the latter prescription he also used as a liniment for scrofula. The ancients used also to give it raw to madmen, Diocles gave it well boiled for phrenitis.^b Pounded and drunk with vinegar and water it is useful as a gargle for quinsy. By three pounded heads with vinegar tooth-ache is relieved, as it is by rinsing the teeth with a decoction, and inserting garlic itself into the hollow teeth. Garlic juice, mixed with goose-grease, is also dropped into the ears. Garlic, in drink or injected with vinegar and soda, checks phthiriasis and scurf, catarths likewise if boiled with milk, also beaten up or mixed with soft cheese; it relieves hoarseness also if taken thus, or in gruel of peas or beans. On the whole, however, it is more useful cooked than raw, boiled than roasted. Thus prepared it is also more beneficial to the voice. When cooked in oxymel^c it expels tape-worms and other parasites of the intestines; in pottage it cures tenesmus. Well boiled it is used as ointment for pains in the temples; cooked, and then beaten up with honey, it makes an ointment for blisters. For a cough a decoction is taken with stale grease, or

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- excreetur, vel pura, sub pruna coctum et cum mellis pari modo sumptum, convulsis, ruptis cum sale et
 55 oleo. nam¹ cum adipe tumores suspectos sanat. extrahit fistulis vitia cum sulphure et resina, etiam harundines cum pice. lepras, lichenas, lentigines exulcerat sanatque cum origano, vel cinis eius ex oleo et garo inlitus, sic et sacros ignes. suggillata aut liventia ad colorem reducit combustum ex melle.
 56 credunt et comitalem morbum sanari, si quis eo in cibis utatur ac potionem, quartanas quoque excutere potum caput unum cum laserpici obolo in vino austero—tussim et alio modo ac pectorum suppurationes quantaslibet sanat fractae incoctum fabae atque ita in cibo sumptum donec sanitatem restituat. facit et somnos atque in totum rubicundiora corpora
 57 —venerem quoque stimulare cum coriandro viridi tritum potumque e mero. vitia eius sunt quod oculos hebetat, inflationes facit, stomachum laedit copiosius sumptum, sitim gignit. cetero contra pituitam et gallinaceis prodest mixtum farre in cibo. iumenta urinam reddere atque non torqueri tradunt, si trito natura tangatur.
 58 XXIV. Lactucae sponte nascentis primum genus est eius² quam caprinam vocant, qua pisces in mare deiecta protinus necantur qui sunt in proximo. huius lact—is sucus³—spissatum mox in aceto pondere obolorum duum adiecto aquae uno cyatho

¹ nam *codd.*: item *Mayhoff*.

² eius *om.* *Q. Delefsen*.

³ lact—is sucus—*Delefsen*: lac aut lactis sucus *codd.*: lac *Mayhoff*.

Nam has here its Plinian sense of "but."

See N. Jasny's *The Wheats of Classical Antiquity* and D'Arcy Thompson's review of that book in *Class. Rev.*, 1946, pp. 120-122.

with milk; or if there be also spitting of blood or pus, it is roasted under live ashes and taken with an equal part of honey. For sprains and ruptures it is used with salt and oil. With fat, however,^a it cures suspected tumours. Mixed with sulphur and resin it draws the pus from fistulas, with pitch extracting even arrows. Leprous sores, lichen and freckly eruptions are cleansed and cured by it and wild marjoram, or by a liniment made out of its ash with oil and fish-sauce. Used in this way it is also good for erysipelas. Burnt to ash and mixed with honey it brings back to the original colour parts that are black-and-blue or livid. It is believed that epilepsy too is cured by garlic taken in food and drink, and that one head of it, taken in a dry wine with an obolus of silphium shakes off a quartan ague. Taken in another way, namely boiled in broken beans and eaten with food until health is restored, it cures a cough, and suppuration of the chest, however severe. It induces sleep also, and makes the body generally of a ruddier colour. It is believed to act as an aphrodisiac, when pounded with fresh coriander and taken in neat wine. Its drawbacks are that it dulls the sight, causes flatulence, injures the stomach when taken too freely, and creates thirst. In addition, mixed with emmer-wheat^b and added to their food it is good for poultry to save them from the pip. Beasts of burden are said to pass urine without pain, if their parts are treated with pounded garlic.

XXIV. The chief kind of lettuce growing wild is *Lettuce.* the one called goat-lettuce, which when thrown into the sea kills immediately all the fish in the neighbourhood. Its milk, or juice, when thickened and then added to vinegar, in doses of two oboli to one

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hydropicis datur. caule et foliis contusis, asperso sale, nervi incisi sanantur. eadem trita ex aceto conluta matutinis bis mense dentium dolorem¹ prohibet.

59 XXV. Alterum est genus quod Graeci caesapon vocant. huius folia trita et cum polenta inlita ulceribus medentur. haec in arvis nascuntur. tertium genus in silvis nascens *ισάριον* vocant. huius folia trita cum polenta vulneribus prosunt. quarto infectores lanarum utuntur. simile erat lapatho silvestri foliis, nisi plura haberet et nigriora. sanguinem sistit, phagedaenas et putrescentia ulcera et quae serpunt sanat, item tumores ante suppurationem, ignem sacrum radice vel foliis. prodest vel ad lienes pota. haec propria singulis.

60 XXVI. Communia autem sponte nascentibus candor, caulis interdum cubitali longitudine, thyrsos et foliis scabritia. ex iis rotunda folia et brevia habentem sunt qui hieracion vocent, quoniam accipitres scalpendo eam sucoque oculos tinguendo obscuritatem,

61 cum sensere, discutiant. sucus omnibus candidus, viribus quoque papaveri similis, carpitur per messes inciso caule, conditur fictili novo, ad multa praeclarus. sanat omnia oculorum vitia cum lacte mulierum, argema, nubiculas, cicatrices adustionesque omnes, praecipue caligines. inponitur etiam oculis in lana

62 contra epiphoras. idem sucus alvum purgat in posca

¹ conlutos . . . dentes dolere maxime probat Mayhoff.

² *Polenta* was pearl-barley porridge.

cyathus of water, is prescribed for dropsical patients. The crushed stalk and leaves, sprinkled with salt, cure a cut sinew. The pounded plant and vinegar, used as a mouth-wash twice a month in the morning, keeps away toothache.

XXV. There is a second kind, called caesapon by the Greeks, the pounded leaves of which, made into an ointment with pearl-barley,^a heal sores. These two grow in the open fields. A third kind growing in woods is called *ισάτις*. Its leaves pounded up with pearl-barley are good for wounds. A fourth kind is used by dyers of wools. Its leaves would be like those of wild sorrel, were they not more numerous and darker. By its root or leaves it stanches bleeding, heals phagedaenic and putrefying ulcers, spreading ulcers, tumours before suppuration, and erysipelas. Taken in drink it is good even for the spleen. Such are the peculiar properties of the several kinds.

*Various
kinds of
lettuce.*

XXVI. The characteristics, however, common to the wild kinds are whiteness, a stem occasionally a cubit long, and a roughness on the stalk and on the leaves. Of these kinds, one with round, short leaves is called by some hieracion (hawkweed), since hawks, by tearing it open and wetting their eyes with the juice, dispel poor vision when they have become conscious of it. The juice in all of them is white, in its properties, also, like that of the poppy; collected at harvest by cutting the stem, it is stored in new earthenware, being excellent for many purposes. With woman's milk it heals all eye-diseases—white ulcers, films, all wounds and inflammations, and especially dimness of sight. It is also applied to the eyes on wool for fluxes. The same juice purges the bowels if drunk in vinegar and water in doses not

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potus ad duos obolos. serpentium ictibus medetur in vino potus, et folia thyrsique triti ex aceto bibuntur. vulneri inlinuntur maxime contra scorpi-
num ictus, contra vero phalangia commixto vino et
63 aceto. aliis quoque venenis resistunt, exceptis quae strangulando necant aut his quae vesicae nocent, item psimithio excepto. inponuntur et ventri ex melle atque aceto ad detrahenda vitia alvi. urinae difficultates sucus emendat. Crateuas eum et hydropicis obolis duobus in aceto et cyatho vini
64 dari iubet. quidam et e sativis colligunt sucum minus efficacem. peculiare earum effectus (praeter iam dictos somnum faciendi veneremque inhibendi, aestum refrigerandi, stomachum purgandi, sanguinem augendi) non pauci restant, quoniam et inflationes discutiunt ructusque lenes faciunt, concoctionem adiuvant, cruditatem ipsae numquam faciunt. nec ulla res in cibis magis aviditatem incitat inhibetque eadem. in causa alterutraque modus est. sic et alvum copiosiores solvunt, modicae
65 sistunt. lentitiam pituitae digerunt atque, ut aliqui tradiderunt, sensus purgant, stomachis dissolutis utilissimae. adiuvantur in eo usu et oxypori obolis asperitatem addito dulci ad intinctum aceti temperantes, si crassior pituita sit, scillite aut vino absinthite, si et tussis sentiatur, hysopite admixto. dantur coeliacis cum intubo erratico et ad duritiam

^a See XIX. §§ 127 ff.

^b Or, "produces mild belchings."

exceeding two oboli. Drunk in wine it heals snake-bites, as do its leaves and stalks when pounded and drunk in vinegar. They are applied as ointment to a wound, especially for the stings of scorpions; for those, however, of venomous spiders wine and vinegar are added. They also neutralise other poisons, except those which kill by suffocation, or those which hurt the bladder, white lead also being an exception. They are applied to the belly with honey and vinegar to clear away troubles of the bowels. The juice corrects difficulty in making water. Crateuas prescribes it also for dropsy in doses of two oboli with vinegar and a cyathus of wine. Some collect the juice of the cultivated lettuce also, but it is less efficacious. The special properties of lettuces, besides those already mentioned^a of causing sleep, checking sexual desire, cooling a heated body, cleansing the stomach and making blood, are not few; it breaks up flatulence, calms belching,^b aids digestion without ever itself causing indigestion. No other article of diet has a greater power of both increasing appetite and also of diminishing it. In either case moderation of the amount taken is the reason; thus an immoderate amount loosens the bowels, while a moderate amount binds them. Lettuces loosen thick phlegm, and, as some have put on record, clear the senses, being very useful to stomachs which are out of order. They are aided for these purposes by oboli of digestive, the mixer modifying the sharpness by the addition of a sweet wine until it is no greater than that of vinegar sauce, mixing with it, if the phlegm be thick, squill or wormwood wine; if a cough also be experienced, hyssop wine. Lettuces are given with wild endive for coeliac affections and for hardness

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- 66 praecordiorum. dantur et melancholicis candidae copiosiores et ad vesicae vitia. Praxagoras et dysintericis dedit. ambustis quoque prosunt recentibus, priusquam pusulae fiant, cum sale inlitae. ulcera etiam quae serpunt coercent, initio cum aphronitro, mox in vino. tritae igni sacro inlinuntur. convulsa et luxata caulibus tritis cum polenta ex aqua frigida leniunt, eruptiones papularum ex vino et
- 67 polenta. in cholera quoque coctas patinis dederunt, ad quod utilissimae quam maximi caulis et amarae. quidam et lacte infundunt. deferrefacti hi caules et stomacho utilissimi traduntur, sicut somno aestiva maxime lactuca et amara lactensque, quam meconidem vocavimus. hoc lacte et oculorum claritati cum muliebri lacte utilissimum esse praecipitur, dum tempestive cum capite ¹ inunguntur oculi et ad
- 68 vitia quae frigore in his facta sint. miras et alias invenio laudes: thoracis vitiis prodesse non secus quam habrotonum cum melle Attico, conpurgari et feminas hoc cibo, semen sativarum contra scorpiones dari, semine trito ex vino poto et libidinum imaginationes in somno conpesci, temptantes aquas non nocere lactucam edentibus. quidam tamen frequentiores in cibo officere claritati oculorum tradiderunt.

¹ tempestivo et capiti *variae lectiones*. *Add. cum Ianus.*

^a See p. 16, note j.

^b All kinds of depression, from that caused by biliousness to true melancholia, are included under this term.

^c Refers to cholera nostras.

^d Apparently *lacte* is accusative. Perhaps (with *ex* for *et*), "inject in milk."

in the abdomen.^a White lettuce in great quantity is given to melancholic ^b patients and for bladder troubles. Praxagoras gave it also to patients with dysentery. It is good for fresh burns, if applied with salt before the blisters form. They check spreading ulcers, if applied at first with saltpetre, afterwards in wine. Pounded they are applied in cases of erysipelas. The pounded stalks, added to pearl-barley and applied with cold water, soothe cramps and sprains, and eruptions of pimples when applied with wine and pearl-barley. In cholera ^c also they have been given cooked in a pan, for which purpose the most beneficial are the bitter ones with the largest stems. Some people too inject the lettuce milk.^d Their stalks thoroughly boiled are said to be very beneficial to the stomach; likewise for sleep the summer lettuce especially, and the milky, bitter kind, which we have called meconis.^e This milk added to woman's milk is prescribed also as very useful for clearness of vision if the eyes and the head are bathed in good time, and likewise for eye troubles caused by chill. I find much other extravagant praise of lettuce: that with Attic honey it is as good as southernwood^f for chest complaints; that menstruation is regulated by its use as food; that the seed of cultivated lettuce is given for scorpion stings; that the crushed seed taken in wine prevents libidinous dreams; that noxious ^g waters do not harm those who eat lettuce. Some however have maintained that when eaten too often they impair the eye-sight.

^a See XIX. § 126.

^f See XXI. § 60.

^g See XXXI. § 15.

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- 69 XXVII. Nec beta sine remediis est utraque: sive candidae sive nigrae radix recens et madefacta suspensa funiculo contra serpentium morsus efficax esse dicitur, candida beta cocta et cum alio crudo sumpta contra taenias, nigrae radices in aqua coctae porriginem tollunt, atque in totum efficacior esse traditur nigra. sucus eius capitis dolores et vertigines, item sonitum aurium sedat infusus his, ciet
70 urinam. medetur dysintericis iniecta et morbo regio, dolores quoque dentium sedat inlitus sucus et contra serpentium-ictus valet, sed huic¹ radici dumtaxat expressus. ipsa vero decocta pernionibus occurrit. alba epiphoras sedat fronti inlita, aluminis parvo admixto ignem sacrum. sine oleo trita sic et
71 adustis medetur. et contra eruptiones papularum, coctaque eadem contra ulcera quae serpunt inlinitur, et alopeciis cruda et ulceribus quae in capite manant. sucus eius cum melle naribus inlitus caput purgat. coquitur et modice² cum lenticula addito aceto, ut ventrem molliat. validius cocta fluctiones stomachi et ventris sistit.
- 72 XXVIII. Est et beta silvestris quam limonium vocant, alii neuroidem, multum minoribus foliis tenuioribusque ac densioribus, undecim saepe caulium.³ huius folia ambustis utilia gustantium os

¹ huic *codd.*: hic *Sillig.*: hoc *Mayhoff.*

² modice *om.* *plures codd.*: post aceto velit ponere *Mayhoff.*

³ Pro caulium *Io. Müller.* et *Mayhoff* scribunt cauli uni. *Vetus coniectura est caule lili.*

^a The emendations were suggested to avoid referring *huic* to the dark variety, as no other variety has been mentioned since § 69. The meaning would then be that the juice must be extracted from the root, not from the stalk.

^b *Modice* and *validius* seem to refer, not to the length of the boiling, but to its violence.

XXVII. Not without healing properties is either *White and black beet.* kind of beet; the fresh root of either the white variety or of the dark, if soaked and hung on a cord is said to be efficacious against serpent bites; white beet boiled and taken with raw garlic against tapeworms. Dark roots boiled in water remove dandruff; the dark for all purposes is held to be the more efficacious. Its juice relieves headache and giddiness, noises in the ears if poured into them, and it is diuretic. Injected it is a remedy for dysentery and jaundice; the juice used as liniment relieves toothache, besides being an antidote for serpent bites, but only if extracted from the dark^a root. A decoction, moreover, of the beet itself relieves chilblains. White beet applied to the forehead allays fluxes of the eyes, and mixed with a little alum, erysipelas. Similarly applied, when beaten up without oil it also heals burns. It is also used for eruptions of pimples; again, when boiled, it is applied to spreading sores, likewise raw for mange, and for running sores on the head. Its juice applied with honey to the nostrils clears the head. It is gently^b boiled with lentils, with vinegar added, in order to relax the bowels. Boiled faster^b beet checks fluxes of the stomach and bowels.

XXVIII. There is also a wild beet, called by *Wild beet.* some limonium,^c by others neuroides,^d with leaves much smaller, thinner and closer together, often having eleven stalks.^e Its leaves, useful for burns, dry the mouth of those who taste them. Its seed,

^c "Meadow-plant."

^d "Sinew-like."

^e Or, "often eleven on one stalk," if Müller's conjecture *cauli uni* be adopted.

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adstringunt. semen acetabuli mensura dysintericis prodest. aqua autem betae radice decocta maculas vestium elui dicunt, item membranarum.

- 73 XXIX. Intubi quoque non extra remedia sunt. sucus eorum cum rosaceo et aceto capitis dolores lenit, idemque cum vino potus iocineris et vesicae, et epiphoris inponitur. erraticum apud nos quidam ambubaiam appellavere. in Aegypto cichorium vocant quod silvestre sit, sativum autem serim, quod est minus et venosius.

- 74 XXX. Cichorium refrigerat in cibo sumptum et inlitum collectiones; sucus decocti ventrem solvit, iocineri et renibus et stomacho prodest. item, si in aceto decoquatur, urinae tormina discutit, item morbum regium ex mulso, si sine febris sit. vesicam adjuvat. mulierum quidem purgationibus decoctum in aqua adeo prodest ut emortuos partus trahat. adiciunt Magi suco totius cum oleo perunctos favorabiliores fieri et quae velint facilius impetrare, quod quidem¹ propter singularem salubritatem aliqui chreston appellant, alii pancration.

- 75 XXXI. Et silvestre genus—alii hedyphnoida vocant—latioris folii, stomachum dissolutum adstringit cocta, crudaque sistit alvum. et dysintericis prodest, magis cum lente. rupta et convulsa utroque genere iuvantur, item genitura quibus valetudinis morbo effluat.

¹ *Variae lectiones dant codd. Detlefsen scribit quando quidem et Mayhoff quamquam idem.*

^a Pliny is still dealing with endive, not true chicory—see XXI. 88 and XIX. 129.

^b For these see Introduction, pp. xviii–xxi.

^c That is, “sweet-scented” or “fragrant.”

in doses of one acetabulum, is good for dysentery. The liquid moreover decocted from the root of the beet washes out, it is said, the stains on clothes as well as those on parchment.

XXIX. Endives also are not without their value *Endive.* in medicine. Their juice with rose oil and vinegar relieves headache; moreover, drunk with wine, pains of the liver and bladder; it is also applied to fluxes from the eyes. The wild endive certain among us have called ambubaia. In Egypt they call the wild kind ^a cichorium; the cultivated they call seris, a variety which is smaller and has more veins.

XXX. Chicory taken in food or applied as *Chicory.* liniment cools gatherings. The juice of the boiled-down vegetable loosens the bowels, and benefits liver, kidneys and stomach. Again, if it is boiled down in vinegar it dispels pain of urination, jaundice also if taken in honey wine, provided that there is no fever. It helps the bladder. Boiled down in water it so helps the purgation of women as even to withdraw the dead unborn baby. The Magi ^b add that those who have anointed themselves with the juice of the entire plant, mixed with oil, become more popular, and obtain their requests more easily. So great indeed are its health-giving properties that some call it chreston (useful) others pancration (almighty).

XXXI. The wild kind—some call it hedyphnois ^c has a broader leaf; boiled, it acts as an astringent upon a relaxed stomach, and eaten raw it checks looseness of the bowels. It is beneficial in dysentery, more so when taken with lentils. Ruptures and cramps are relieved by both kinds, as also are those troubled with a diseased flux of sperm.

PLINY: NATURAL HISTORY

- 76 XXXII. Seris et ipsa lactucae simillima duorum generum est: silvestris melior, nigra ista et aestiva, deterior hiberna et candidior. utraque amara, stomacho utilissima, praecipue quem umor vexet. cum aceto in cibo refrigerant vel inlitaе, discutiuntque et alios quam stomachi. cum polenta silvestrium radices stomachi causa sorbentur, et cardiacis inlinuntur super sinistram mammam; et ex aceto omnes hae et podagricis utiles et sanguinem reicientibus, item quibus genitura effluat, alterno dierum potu. Petronius Diodotus, qui anthologumena scripsit, in totum damnavit serim multis modis arguens, sed aliorum omnium opinio resistit.
- 77 XXXIII. Brassicae laudes longum est exsequi, cum et Chrysippus medicus privatim volumen ei dicaverit per singula membra hominis digestum, et Dieuches, ante omnes autem Pythagoras, et Cato non parcius celebraverit, cuius sententiam vel eo diligentius persequi par est, ut noscatur qua medicina
- 79 usus sit annis dc Romanus populus. In tres species divisere eam Graeci antiquissimi: crispam, quam selinada vocaverunt a similitudine apii foliorum, stomacho utilem, alvum modice mollientem, alteram heliam, latis foliis e caule exeuntibus, unde caulodem quidam vocavere, nullius in medicina momenti. tertia est proprie appellata crambe, tenuioribus foliis et

^a See note on p. 52.

^b R.r. 156, 157.

XXXII. *Seris* also, itself very similar to lettuce, is of two kinds. The wild is the better; it is dark and grows in summer, while the winter variety, which is whiter, is not so good. Each is bitter, and very beneficial to the stomach, especially to one troubled by a humour. They are cooling when taken with vinegar in food, and when applied as liniment; they disperse other humours besides those in the stomach. With pearl-barley the roots of the wild variety are taken in a draught to benefit the stomach; for heart-burn^a they are applied above the left breast; prepared with vinegar all these are useful for gout, for spitting of blood, and likewise for fluxes of sperm, a dose to be taken on alternate days. Petronius Diodotus, who wrote a medical Herbal, gives many arguments condemning *seris* altogether, but the opinion of all others is against him.

XXXIII. It would be a long task to make a list of all the praises of the cabbage, since not only did Chrysippus the physician devote to it a special volume, divided according to its effects on the various parts of the body, but Dieuches also, and Pythagoras above all, and Cato^b no less lavishly, have celebrated its virtues; the views of the latter it is meet to set forth all the more carefully for the sake of learning what medicine the Roman people used for six hundred years. The earliest Greeks divided cabbage into three varieties; (*a*) the curly, which they called *selinas* from the resemblance of its leaves to those of parsley, useful for the stomach and moderately laxative; (*b*) the *helia*, with broad leaves growing out of the stem, from which some have called it *caulodes*, of no importance in medicine; (*c*) the third, *crambe* properly so-called, with thinner leaves of

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- simplicibus densissimisque, amarior sed efficacissima.
- 80 Cato crispam maxime probat, dein levem grandibus foliis, caule magno. prodesse tradit capitis doloribus, oculorum caligini scintillationique, lienī, stomacho, praecordiis crudam ex aceto ac melle, coriandro, ruta, menta, laseris radícula sumptam acetabulis duobus matutino, tantamque esse vim ut qui terat
- 81 haec validiorem fieri se sentiat. ergo vel cum his tritam sorbendam, vel ex hoc intinctu sumendam, podagrae autem morbisque articulariis inlini¹ cum rutae coriandri salis mica, et hordei farina, aqua quoque eius decoctae nervos articulosque mire iuvari si foveantur.¹ vulnera et recentia et vetera, etiam carcinomata quae nullis aliis medicamentis sanari possint foveri prius calida aqua iubet ac bis
- 82 die tritam inponi. sic etiam fistulas et luxata et tumores, quos² evocari, quosque discuti opus sit. insomnia etiam vigiliasque tollere decoctam, si ieiuni edint quam plurimam ex oleo et sale, tormina, si decocta iterum decoquatur addito oleo, sale, cumino, polenta. si ita sumatur sine pane, magis profuturam. inter reliqua bilem detrahi per vinum nigrum pota.

¹ *Textus hoc loco dubius. Detlefsen scribit cum rutae coriandri et salis mica, hordei farina . . . decocta puncto post iuvari addito. Mayhoff scribit cum ruta et coriandro et salis mica et hordei farina; aqua quoque eius decocta puncto post foveantur addito.*

² quos add. Mayhoff.

^a R.r. 157.

^b See p. 16, note f.

^c Generally taken to mean "want of sleep," as in § 186.

plain shape and very close together, is more bitter but very beneficial. Cato^a thinks most highly of the curly variety, next after it approving the smooth cabbage with large leaves and big stem. He considers it good for headache, dimness of the eyes and sparks in them, for the spleen, the stomach and the hypochondria,^b when taken raw in the morning with oxymel, coriander, rue, mint and root of silphium, in doses of two acetabula, saying that their power is so great that he who pounds the ingredients together feels himself growing stronger. He therefore recommends that it should either be pounded with these herbs when taken in a draught, or at least be in sauce made from them; while for gout and rheumatic joints a liniment should be made with a dash of rue, coriander and salt, along with barley flour; he adds that its water, boiled down, is wonderfully beneficial for sinews and joints, if they are fomented with it. Wounds, whether fresh or old, and even cancerous sores, which can be healed by no other treatment, should, so he prescribes, first be fomented with hot water and then have pounded cabbage applied to them twice daily. Similar treatment he prescribes for fistulas also and sprains; for tumours too, both such as must be brought to a head and those that need to be dispersed. He says that boiled cabbage prevents dreams^c and sleeplessness, if you eat fasting as much as possible with oil and salt; gripings it relieves if after boiling it is boiled down again with the addition of oil, salt, cummin and pearl-barley. If when so prepared it is taken without bread, it will, he adds, be more beneficial. Among other things he tells us that bile is cleared away by drinking cabbage in dark wine; and what is more,

*Cato's
opinion of
cabbage.*

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- 83 quin et urinam eius qui brassicam esitaverit adser-
vari iubet, calefactamque nervis remedio esse. verba
ipsius subiciam ad exprimendam sententiam: pueros
pusillos si laves ea urina, numquam debiles fieri.
auribus quoque ex vino sucum brassicae tepidum
instillari suadet, idque etiam tarditati audientium
prodesse adseverat, et inpetigines eadem sanari
sine ulcere.
- 84 XXXIV. Graecorum quoque opiniones iam et
Catonis causa poni convenit, in his dumtaxat quae
ille praetermiserit. biles trahere non percoctam
putant, item alvum solvere, eandemque bis coctam
sistere. vino adversari ut inimicam vitibus, antece-
dente in cibis caveri ebrietatem, postea sumpta
85 crapulam discuti. hunc cibum et oculorum claritati
conferre multum, sucum vero crudae vel angulis
tantum tactis cum Attico melle plurimum. facillime
concoqui, ciboque eo sensus purgari. Erasistrati
schola clamat nihil esse utilius stomacho nervisque,
ideo paralyticis et tremulis dari iubet et sanguinem
86 excreantibus. Hippocrates coeliacis et dysintericis
bis coctam cum sale, item ad tenesnum et renium
causa, lactis quoque ubertatem puerperis hoc cibo

^a Perhaps children of both sexes are meant.

he recommends that the urine of a person who has lived on a cabbage diet should be kept, because when warmed it is a cure for pains in the sinews. I will add his actual words to explain his thought: "Little boys" if you bathe them with such urine, never become weak." He also advises that the juice of cabbage should be poured warm into the ears, with wine added, and he insists that this treatment benefits those who are hard of hearing, and that impetigo by the same means is cured without ulceration.

XXXIV. Just because we have dealt with Cato it is well to put down now the views of the Greeks also, limiting ourselves to making good Cato's omissions. If not overcooked they think that cabbage brings away bile, also that it loosens the bowels, checking diarrhoea however if it be boiled twice. As cabbage is the enemy of the vine, they say that it opposes wine; that if taken in food beforehand it prevents drunkenness, taken after drinking it dispels its unpleasant effects. They hold that cabbage taken as food greatly brightens the vision, and that the benefit is very great indeed if the juice of raw cabbage and Attic honey merely touch the corners of the eyes. They add that cabbage is very easily digested, and that its use as food clears the senses. The school of Erasistratus loudly declares that nothing is more useful than cabbage for the stomach and sinews, and he therefore prescribes it for paralysis and palsy, as well as for spitting of blood. Hippocrates prescribed twice-boiled cabbage and salt for coeliac trouble and dysentery, also for tenesmus and kidney troubles, holding also that its use as food gave a rich supply of milk to lying-in women and benefited

*Greek
opinions
about
cabbage.*

PLINY: NATURAL HISTORY

- fieri iudicans et purgationem feminis. crudus quidem caulis si mandatur, partus quoque emortuos pellit. Apollodorus adversus fungorum venena semen¹ aut sucum bibendum censet, Philistion opisthotonicis sucum ex lacte caprino cum sale et
 87 melle. invenio et podagra liberatos edendo eam decoctaeque ius bibendo. hoc et cardiacis datum et comitialibus morbis addito sale, item splenicis in vino albo per dies XL nec non ictericis et phreneticis. raucis² crudae sucum gargarizandum bibendumque demonstrat, contra vero singultus cum coriandro et aneto et melle ac pipere ex aceto.
 88 inlitam quoque prodesse inflationibus stomachi, item serpentium ictibus et sordidis ulceribus ac vetustis, vel aqua ipsa cum hordeacia farina, sucum ex aceto vel cum feno Graeco. sic aliqui et articulis podagrisque inponunt. epinyctidas et quidquid aliud serpit in corpore inposita levat, item repentinas caligines, has et si manditur ex aceto, suggillata vero et alios livores pura inlita, lepras et psoras cum
 89 alumine rotundo ex aceto. sic et fluentes capillos retinet. Epicharmus testium et genitalium malis hanc utilissime inponi, efficacius eandem cum faba trita, item convolsis, cum ruta contra ardorem febrium et stomachi vitia, cum rutae semine ad

¹ *Hic excidisse ex aceto vel e melle coni. Mayhoff.*

² *raucis Mayhoff et codd.: radicis Detlefsen. In codd. nec non post ictericis inveniuntur. Ego transposui, secundum Mayhoff distinguo.*

^a *The cardiacus morbus was also a very serious ailment, a kind of syncope.*

women's purgings. The stalk indeed eaten raw brings out the dead unborn baby. Apollodorus holds that its seed should be eaten, or its juice drunk, to counteract poisonous fungi; Philistion prescribes it to be taken in goat's milk, with salt and honey, for opisthotonic tetanus. I find that gout has been cured by eating cabbage and drinking cabbage water; the latter has been given with the addition of salt for heart-burn also ^a and epilepsy, and with white wine for a period of forty days for diseases of the spleen, as well as for jaundice and phrenitis. For hoarseness he prescribes the juice of the raw cabbage as a gargle or drink, but for hiccoughs he recommends it to be taken in vinegar with coriander, dill, honey and pepper. An application of it is good for flatulence of the stomach, snake bite and putrid sores of long standing; if you like, the mere water may be used with barley meal, the juice in vinegar or with fenugreek. In this way some apply it to aching joints and gouty limbs. An application of it relieves epinyctis ^b and every other kind of spreading eruption, and also sudden dimness of sight; the last too is benefited by eating it in vinegar, but for bruises and other livid marks the application should be of cabbage alone, for leprous sores and itch, of cabbage in vinegar with a ball of alum. Applied in this way it also prevents the hair from falling out. Epicharmus says that a local application of cabbage is very good for troubles of the testes and genitals, that cabbage and crushed beans are more efficacious still, and likewise for convulsions; that with rue it relieves high fever and stomach troubles, and with the seed of rue it brings

^b See p. viii.

PLINY: NATURAL HISTORY

secundas et muris aranei morsus. foliorum aridorum farina alterutra parte exinanit.¹

- 90 XXXV. Ex omnibus brassicae generibus suavissima est cyma, etsi inutilis habetur, difficilis in concoquendo et renibus contraria. illud quoque non est omittendum, aquam decoctae ad tot usus laudatam faetere humi effusam. stirpium brassicae aridorum cinis inter caustica intellegitur, ad coxendicum dolores cum adipe vetusto, at cum lasere et aceto instar² psilotri evulsis inlitus pilis nasci alios
- 91 prohibet. bibitur et cum oleo subfervefactus vel per se elixus ad convolsa et rupta intus lapsoque ex alto. nulla ergo sunt crimina brassicae? immo vero apud eosdem animae gravitatem facere, dentibus et gingivis nocere. et in Aegypto propter amaritudinem non estur.

- 92 XXXVI. Silvestris sive erraticae inmenso plus effectus laudat Cato, adeo ut aridae quoque farinam in olfactorio collectam, vel odore tantum naribus raptò, vitia earum graveolentiamque sanare adfirmet. hanc alii petraeam vocant, inimicissimam vino, quam praecipue vitis fugiat aut, si non possit
- 93 fugere, moriatur. folia habet tenuia,³ rotunda, parva, levia, plantis oleris similior, candidior sativa et hirsutior. hanc inflationibus mederi, melancholicis quoque ac vulneribus recentibus cum melle,

¹ *Ultimas sententias ita dist. Mayhoff.*

² instar *Urlichs, Detlefsen*: inter *codd.*: inter et psilotra *Mayhoff.*

³ tenuia *Mayhoff*: bina *Detlefsen*: vina *F*: bina *dT*: una *E*.

^a The reading is uncertain. Perhaps "uniform," "single" (*una*), or "in pairs" (*bina*).

^b "Melancholy" in ancient medicine comprised all the complaints that were supposed to be caused by "black bile";

away the after-birth and cures the bite of the shrew-mouse. The dried leaves when powdered purge by vomit or by stool.

XXXV. Of all the varieties of cabbage the most pleasant-tasted is *cyma*, although it is thought to be unwholesome, being difficult of digestion and bad for the kidneys. Further, we must not forget that the water in which it has been boiled, though praised for its many uses, has a foul smell when poured out on the ground. The ash of dried cabbage-stalks is understood to be caustic, and with stale grease is used for sciatica, but with silphium and vinegar, applied as a depilatory, it prevents the growth of other hair in place of that pulled out. It is also taken lukewarm in oil, or boiled in water by itself, for convulsions, internal ruptures, and falls from a height. Has cabbage then no faults to be charged with? Nay, we find in the same authors that it makes the breath foul and harms teeth and gums. In Egypt too, because of its bitterness, it is not eaten.

XXXVI. Cato gives vastly higher praise to the wild, or stray, cabbage, so much so that he asserts that the mere powder of the dried vegetable, collected in a smelling-bottle, or the scent only, snuffed up the nostrils, removes nose-troubles and any offensive odour. Some call this variety rock-cabbage; it is strongly antipathetic to wine, so that the vine tries very hard to avoid it, or, if it cannot do so, dies. It has thin ^a leaves, round, small, and smooth; though rather like the ordinary vegetable, it is both whiter and more hairy than the cultivated kind. Chrysippus tells us that it heals flatulence, biliousness,^b and fresh

see p. 40. Here, from the remedy, it appears to be some local pain near the liver.

PLINY: NATURAL HISTORY

- ita ne solvantur ante diem septimum, strumis, fistulis in aqua contritam Chrysippus auctor est. et alii vero conpescere mala corporis quae serpant—nomas vocant—item excrescentia absumere, cicatrices ad
94 planum redigere, oris ulcera et tonsillas manducatam et coctam suco gargarizato cum melle tollere, item psoras et lepras veteres, ipsius tribus partibus cum duabus aluminis in aceto acri inlitis. Epicharmus satis esse eam contra canis rabiosi morsum inponi, melius si cum lasere et aceto acri, necari quoque canes ea, si detur ex carne. semen eius tostum auxiliatur contra serpentes, fungos, tauri
95 sanguinem. folia cocta splenicis in cibo data et cruda inlita cum sulphure et nitro prosunt, item mammarum duritiae. radicum cinis uvae in faucibus tumentis tactu medetur, et parotidas cum melle inlitis reprimit, serpentium morsus sanat. virium brassicae unum et magnum argumentum addemus admirabile: crustae occupent intus vasa omnia in quis aquae fervent, ut non sit avellere eas, si brassica in his decoquatur, abscedunt.
- 96 XXXVII. Inter silvestres brassicas et lapsana est pedalis altitudine, hirsutis foliis, sinapi similis, nisi candidior esset flore. coquitur in cibo, alvum lenit et molit.

XXXVIII. Marina brassica vehementissime ex omnibus alvum ciet. coquitur propter acrimoniam cum pingui carne, stomacho inimicissima.

wounds, if applied with honey and not removed till the seventh day; also that beaten up in water it cures scrofula and fistulas. Others moreover maintain that it checks running sores, called *nomae*, removes too excrescences, and smooths away scars; that if it is chewed, or if cabbage water be used with honey as a gargle, sores in the mouth or on the tonsils disappear, as also do the itch and chronic leprous sores, if three parts of it and two of alum in strong vinegar be applied as a liniment. Epicharmus thought this cabbage a sufficient remedy if applied to the bite of a mad dog, and an even better one with the addition of silphium juice and strong vinegar; he also said that dogs are killed by it, if given with their meat. Its seed if roasted is a help against serpents, fungi, and bull's blood. The boiled leaves taken in food or applied raw with sulphur and soda relieves splenic diseases and also hardness of the breasts. The ash of its roots even by a mere touch cures a swollen uvula, reduces parotid swellings if applied with honey, and heals bites of serpents. Of the power of cabbage I will add but one proof, which is both striking and wonderful: let the scale form on the inside of any vessel in which water is boiled, so that it cannot be scraped away; yet it disappears if cabbage is boiled in them.

XXXVII. Among wild cabbages is also *lapsana*, *Lapsana*, which is a foot high, has hairy leaves, being like mustard, except that the flower is whiter. It is eaten cooked, and soothes and relaxes the bowels.

XXXVIII. Of all the varieties, sea cabbage is the strongest purgative. On account of its pungency it is cooked with fat meat, and is very bad for the stomach.

PLINY : NATURAL HISTORY

- 97 XXXIX. Scillarum in medicina alba est—feminae nigrae—quae candidissima fuerit utilissima erit. huic aridis tunicis direptis quod relicum e vivo¹ est consectum suspenditur lino modicis intervallis. postea arida frusta in cadum aceti quam asperrimi pendentia inmerguntur ita ne ulla parte vas contin-
- 98 gant. gypso deinde oblitus cadus ponitur sub tegulis totius diei solem accipientibus. hoc fit ante solstitium, diebus XLVIII.² post eum numerum dierum tollitur vas, scilla eximitur, acetum transfunditur. hoc clariorem oculorum aciem facit, salutare est stomachi laterumque doloribus diebus binis³ sumptum. sed tanta vis est ut avidius haustum extinctae animae momento aliquo speciem praebeat.
- 99 prodest et gingivis et dentibus vel per se commendata. taenias et reliqua ventris animalia pellit ex aceto et melle sumpta. linguae quoque recens subiecta praestat ne hydropici sitiant. coquitur pluribus modis : in olla quae coiciatur in clibanum aut furnum, vel adipe aut luto inlita, aut⁴ frustatim in
- 100 patinis. et cruda siccatur, deinde conciditur coquiturque in aceto, tum serpentium ictibus inponitur. tosta quoque purgatur et medium eius iterum in aqua coquitur. usus sic coctae ad hydropicos, ad urinam ciendam tribus obolis cum melle et aceto potae, item splenicos et stomachicos, si non sentiant ulcus,

¹ Fortasse in medio. *Dioscorides* II. 171 τὸ μεσώταρον.

² hoc fit . . . XLVIII post contingent *codd.* : *trans. Mayhoff.*

³ binis aut pinis *codd.* : diebus binis *Sillig* : ieiunis *coni. Mayhoff.*

⁴ aut *codd.* : vel *Mayhoff.*

^a A strange phrase. Perhaps "in the centre." See critical note.

XXXIX. The squill used in medicine is white *Squills*. (the dark squill is female), and the whiter it is the more beneficial. When the dried skin has been torn from it, what is left of the living ^a plant is cut up and hung on a cord at short distances. Afterwards the dry pieces are plunged still hanging into a jar of very strong vinegar, so as not to touch any part of the vessel. Then the jar, plastered with gypsum, is placed under tiles which receive the sun the whole day long. This is done forty-eight days before the solstice. After this number of days the vessel is removed and the squills taken out, the vinegar being poured into another vessel. This vinegar sharpens the vision, is beneficial for pains of the stomach and sides if taken for two days at a time.^b But so great is its strength that too copious a draught produces for a moment the appearance of death. Even when chewed by themselves squills are good for the gums and teeth. Taken in vinegar and honey they bring away tapeworm and other intestinal parasites. Fresh squills placed under the tongue prevent dropsical patients from suffering thirst. They are cooked in several ways: either in a pot lined with fat or clay, to be put into an oven or furnace, or else they are cut up and cooked in a stewpan. Raw squills too are dried, then cut up, boiled in vinegar and then applied to snake bites. Another way is to roast the squills and then clean them, after which the centre parts are again cooked in water. Thus prepared they are used for dropsy, as a diuretic, drunk with honey and vinegar in doses of three oboli, and also for diseases of the spleen

^b Reading *diebus binis*. Mayhoff's *ieiunis* ("fasting") is very attractive, and may well be right.

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- quibus innatet cibus, ad tormina, regiones morbos,
 101 tussim veterem cum suspirio. discutit et foliis
 strumas quadrinis diebus soluta, furfures capitis et
 ulcera manantia inlita ex oleo cocta. coquitur et in
 melle cibi gratia, maxime uti concoctionem faciat.
 sic et interiora purgat. rimas pedum sanat in oleo
 cocta et mixta resinae. semen eius lumborum dolori
 ex melle inponitur. Pythagoras scillam in limine
 quoque ianuæ suspensam contra malorum medica-
 mentorum introitum pollere tradit.
- 102 XL. Ceteri¹ bulbi ex aceto et sulphure vulneribus
 in facie medentur, per se vero triti nervorum con-
 tractioni et ex vino porrigini, cum melle canum
 morsibus; Erasistrato placet cum pice. idem san-
 guinem sistere eos tradit inlitos cum melle. alii, si
 e naribus fluat, coriandrum et farinam adiciunt.
- 103 Theodorus et lichenas ex aceto bulbis curat, erum-
 pentia in capite cum vino austero aut ovo. et
 bulbos epiphoris idem inlinit et siccae lippitudini
 media eorum. vitia quae sunt in facie rubentes
 maxime in sole inliti cum melle et nitro emendant,
 lentiginem cum vino aut cum aceto.² vulneribus
 quoque mire prosunt per se aut, ut Damion, ex
 104 mulso,³ si quinto die solvantur. isdem et aurículas
 fractas curat et testium pituitas. in articularum

¹ ceteri aliquot codd. et Mayhoff: ceterum alii et Detlefsen.

² cum aceto Urlichs, Detlefsen, Mayhoff: cucumi, cum cucu-
 mi, cumino, cum cumino codd. cocto addito.

³ mulso codd.: musco V. Rose.

^a By "bulbs" are meant probably some kinds of onions,
 as well as chives, garlic, etc.

^b The other readings would give "with cucumber" or
 "with cummin."

and stomach, when food floats undigested, provided that no ulceration is felt, for griping pains, jaundice, and chronic cough with asthma. Scrofula is cleared away by squill leaves, if they are left on for four days; dandruff and running sores by an application of squills cooked in oil. Cooked too in honey squills are used as food, especially to promote digestion. So prepared they also purge the bowels. Cooked in oil and mixed with resin squills heal cracks in the feet. The seed mixed with honey is applied to relieve lumbago. Squills too, hung in a doorway, are said by Pythagoras to have power to keep off evil enchantments.

XL. The other bulbs^a cure cuts on the face when *Bulbs* used with vinegar and sulphur, contraction of the sinews too when pounded up and used by themselves, dandruff when mixed with wine, and the bites of dogs when mixed with honey; Erasistratus would mix them with pitch. The same authority holds that applied with honey they stop a flow of blood. Others add coriander and flour for bleeding at the nose. Theodorus treats lichen also with bulbs in vinegar, adding a dry wine or egg for eruptions on the head. The same authority applies them for eye-fluxes, and their centres for dry ophthalmia. Red bulbs in particular, applied in the sun with honey and soda, remove spots on the face, and freckles when applied with wine or with vinegar.^b They are wonderfully good too for wounds, either by themselves, or as Damion advises, with honey wine,^c if the application be allowed to remain for four days at least. By the same means he treats broken ear-laps and hydrocele,

^a V. Rose's reading would mean "with moss."

PLINY : NATURAL HISTORY

- doloribus miscet et¹ farinam. in vino cocti inliti ventri duritiam praecordiorum emolliunt. dysintericis in vino ex aqua caelesti temperato dantur, ad convulsa intus cum silphio pilulis fabae magnitudine. ad sudorem tusi inlinuntur. nervis utiles, ideo et
- 105 paralyticis dantur. luxata in pedibus qui sunt rufi ex iis citissime sanant cum melle et sale. venerem maxime Megarici stimulant, hortensii partum cum sapa aut passo sumpti, silvestres interaneorum plagas et vitia cum silphio pilulis devoratis sedant.
- 106 horum semen contra phalangia bibitur in vino. ipsi ex aceto inlinuntur contra serpentium ictus. semen antiqui bibendum insanientibus dabant. flos bulborum tritus crurum maculas varietatesque igni factas emendat. Diocles hebetari oculos ab his putat. elixos assis minus utiles esse adicit et difficile concoqui ex vi uniuscuiusque naturae.
- 107 XLI. Bulbinem Graeci vocant herbam porraceis foliis, rubicundo bulbo. haec traditur vulneribus mire utilis dumtaxat recentibus. bulbus, quem vomitorium vocant ab effectu, folia habet nigra, ceteris longiora.
- 108 XLII. Inter utilissimos stomacho cibos asparagi traduntur. cumino quidem addito inflationes stomachi colique discutiunt, idem oculis claritatem adferunt, ventrem leniter molliunt, pectoris et

¹ miscet et *Mayhoff*: miscent *codd.*

adding flour also for pains in the joints. Boiled in wine and applied to the belly they soften hardness of the abdomen. For dysentery they are given in wine diluted with rain-water, for internal spasms in pills of the size of a bean compounded with silphium. For sweating they are bruised and applied. They are good for the sinews, and therefore are given to paralytics. Red bulbs, mixed with honey and salt, heal sprains of the foot very quickly. Megarian bulbs are a strong aphrodisiac; garden bulbs taken with concentrated must or raisin wine help delivery; wild bulbs compounded with silphium and swallowed in pills relieve intestinal wounds and affections. The seed of the last is taken in wine against the bite of venomous spiders. The bulbs themselves are applied in vinegar against the bites of serpents. The ancients used to give the seed in drink to persons raving mad. The flowers of bulbs pounded up remove spots on the legs and patches produced by fire. Diocles thinks that the eyes are weakened by them. He adds that when boiled they are less useful than roasted, and that according to the strength of every variety they are difficult of digestion.

XLII. The Greeks call bulbine a plant with leaves *Bulbine.* like those of leeks and with a red bulb. This is said to be wonderfully good for wounds, provided that they are recent. The bulb called the emetic from its effects has dark leaves, longer than those of other kinds.

XLIII. Asparagus is reported to be one of the *Asparagus.* most beneficial foods to the stomach. Indeed if cummin is added it disperses flatulence of the stomach and colon; it improves vision also, moves the bowels gently, benefits pains in the chest and spine as well

PLINY : NATURAL HISTORY

- spinae doloribus intestinorumque vitiis prosunt, vino cum coquantur addito. ad lumborum et renium dolores semen obolorum trium pondere, pari cumini bibitur. venerem stimulant, urinam cient utilissime,
- 109 praeterquam vesica exulcerata. radix ¹ quoque plurimorum praedicatione trita et in vino albo pota calculos quoque exturbat, lumborum et renium dolores sedat. quidam et ad vulvae dolorem radicem cum vino dulci propinant. eadem in aceto decocta contra elephantiasim proficit. asparago trito ex oleo perunctum pungi ab apibus negant.
- 110 XLIII. Silvestrem asparagum aliqui corrudam, aliqui Libycum vocant, Attici orminum. huius ad supra dicta omnia efficacior vis, et candidiori maior. morbum regium extenuant. veneris causa aquam eorum decoctam bibi iubent ad heminam. idem et semen valet cum aneto ternis utriusque obolis. datur et ad serpentium ictus sucus decoctus. radix miscetur radici marathri inter efficacissima auxilia.
- 111 si sanguis per urinam reddatur, semen et asparagi et apii et cumini ternis obolis in vini cyathis duobus Chrysippus dari iubet. sic et hydropicis contrarium esse, quamvis urinam moveat, docet, item veneri, vesicae quoque nisi decoctum, quae aqua si canibus

¹ radix ego: radice codd. Ita ego distinxi. Post exulcerata comma, post pota punctum Dellefsen: post exulcerata comma, post praedicatione punctum Mayhoff.

as intestinal trouble, wine being added when it is being cooked. For pains in the loins and kidneys asparagus seed is taken in drink in doses of three oboli, an equal quantity of cummin being added. It is aphrodisiac and very useful as a diuretic, except when the bladder has been ulcerated. Very many recommend that the root be pounded and taken in white wine, when it also disperses stone, and relieves pains of the loins and kidneys. Some also prescribe this root to be taken in sweet wine for pain in the womb. This root boiled down in vinegar is good for elephantiasis. If a man is rubbed with a mixture of pounded asparagus and oil it is said that he is never stung by bees.

XLIII. Wild asparagus is called by some *corruda*, by others *Libyan*, by the Attics *orminus*. For all the purposes mentioned above its properties are more efficacious than those of the cultivated asparagus, and those of the whiter kind are the more powerful. Both relieve jaundice. As an aphrodisiac, the water in which it has been boiled is recommended to be drunk in doses up to a hemina. Its seed has the same effect mixed with dill and taken in doses of three oboli of each. A decoction of the juice is also given for the bites of serpents. Its root, mixed with the root of fennel, is among our most efficacious aids. In cases of haematuria the seed of asparagus, of parsley, and of cummin is prescribed by Chrysippus in doses of three oboli in two cyathi of wine. He goes on to say that thus prepared, although it is diuretic, yet it is bad for dropsy, as it is for venery, and also for the bladder unless it is boiled in water; that this water kills dogs if they drink it; that the juice of the root

PLINY : NATURAL HISTORY

- detur, occidi eos, in vino decoctae radicis sucum, si ore contineatur, dentibus mederi.
- 112 XLIV. Apio gratia in volgo est. namque rami lactis potionibus per rura innatant et in condimentis peculiarem gratiam habent. praeterea oculis inlitum cum melle, ita ut subinde foveantur ferventi suco decocti, aliisque membrorum epiphoris per se tritum aut cum pane vel polenta inpositum mire auxiliatur. pisces quoque, si aegrotent in piscinis,
- 113 apio viridi recreantur. verum apud eruditos non aliud erutum terra in maiore sententiarum varietate est. distinguitur sexu. Chrysippus feminam esse dicit crispioribus foliis et duris, crasso caule, sapore acri et fervido, Dionysius¹ nigriorem, brevioris radicis, vermiculos gignentem, ambo neutrum ad cibos admittendum, immo omnino nefas, namque id defunctorum epulis feralibus dicatum esse, visus quoque
- 114 claritati inimicum. caule feminae vermiculos gigni,¹ ideoque eos qui ederint sterilesce, mares feminasve, in puerperiis vero ab eo cibo comitiales fieri qui ubera hauriant.² innocentiolem tamen esse marem. eaque causa est ne inter nefastos frutex damnetur. mam-
- 115 marum duritiam inpositis foliis emollit. suaviores aquas potui incoctum praestat. suco maxime radicis cum vino lumborum dolores mitigat, eodem iure instillato gravitatem aurium. semine urinam ciet,

¹ Post Dionysius et radicis lacunam esse putat Mayhoff, qui visus . . . inimicum ut parenthesis dist. et caule . . . gigni uncis includit. Deilefsen sequor.

² hauriant Mayhoff: hauriunt codd.

^a *Apium* includes both parsley and celery.

^b By "male" and "female" plants the ancients often referred to different species.

boiled in wine, if it be held in the mouth, cures toothache.

XLIV. Parsley^a is universally popular, for sprigs *Parsley.* of it are found swimming in draughts of milk everywhere in the country, and in sauces it enjoys a popularity all its own. Moreover applied with honey to the eyes, provided that they are also frequently fomented with a warm decoction, it is wonderfully beneficial, as also for other fluxes on the limbs, when applied pounded up, either by itself or with bread or pearl-barley. Fish also, if they are sickly in ponds, are revived by fresh parsley. But no other plant taken from the ground has caused such a variety of opinion among the learned. Parsley shows distinction of sex.^b Chrysippus says that female parsley has hard and curlier leaves, a thick stem and a sharp, hot taste, Dionysius that it is darker, has a shorter root and breeds grubs; both agree that neither should be classed among the foods—nay, that it is altogether a sin to eat parsley, because it is dedicated to the funeral feasts in honour of the dead, and that it is also bad for the eye-sight. They say that the stem of female parsley breeds grubs, and because of this those who have eaten it, whether male or female, become barren, and actually that sucking babies become epileptic if their nurses have eaten parsley. The male plant however they say is the less injurious. This is why it is not classed among plants utterly taboo. The application of parsley leaves softens hardness of the breasts. To boil parsley in it makes water sweeter to drink. The juice of the root in particular added to wine relieves lumbago, and hardness of hearing if the same liquid be dropped into the ears. The seed is

PLINY : NATURAL HISTORY

menstrua ac secundas partus et, si foveantur semine decocto, suggillata reddit color. cum ovi albo inlitum aut ex aqua coctum potumque renibus medetur, in frigida tritum oris ulceribus. semen cum vino vel radix cum veteri vino vesicae calculos frangunt. semen datur et arquatis ex vino albo.

116 XLV. Apiastrum Hyginus quidem melissophyllum appellat, sed in confessa damnatione est venenatum in Sardinia. contexenda enim sunt omnia ex eodem nomine apud Graecos pendentia.

117 XLVI. Olusatrum, quod hipposelinum vocant, adversatur scorpionibus. poto semine torminibus et interaneis medetur, idem difficultatibus urinae semen eius decoctum ex mulso potum. radix eius in vino decocta calculos pellit et lumborum ac lateris dolores. canis rabiosi morsibus potum et inlitum medetur. sucus eius argentes calefacit potus. quartum genus ex eodem aliqui faciunt oreoselinum, palmum¹ alto² frutice recto, semine cumino simili, urinae et menstruis efficax. heleoselino vis privata contra araneos, eo³ et oreoselino feminae purgantur e vino.

118 XLVII. Alio genere petroselinum quidam appellant in saxis natum, praecipuum ad vomicas, coclearibus binis suci additis in cyathum marrubii suci atque ita calidae aquae tribus cyathis. addidere quidam

¹ palmum *vetus coniectura* : *om. codd.*

² alto *Deilefsen* : *alio codd.*

³ eo et *Mayhoff* : *de, sed et codd.* : *sed et Deilefsen.*

diuretic, aids the menses and the after-birth, and restores bruises to their natural colour if they are fomented with a decoction of the seed. Applied with white of egg, or boiled in water and drunk, parsley cures kidney troubles, and ulcers in the mouth when pounded up in cold water. The seed with wine, or the root with old wine, breaks up stones in the bladder. The seed is also given, in white wine, to jaundice patients.

XLV. Hyginus gives the name of *apiastrum* to *melissophyllum*, but by general consent the Sardinian variety is condemned as poisonous; I must however include in the same class all plants so placed by Greek writers.

XLVI. *Olusatrum* (alexanders), also called *hipposelinum* (horse parsley), is antipathetic to scorpions. Its seed taken in drink cures colic and intestinal worms. The seed too, boiled and drunk in honey wine, cures dysuria. Its root, boiled in wine, expels stone, besides curing lumbago and pains in the side. Taken in drink and applied as liniment it cures the bite of a mad dog. A draught of its juices warms those who have been chilled. A fourth kind of parsley is made by some authorities out of *oreoselinum* (mountain parsley), a straight shrub a palm high, with a seed like cummin, beneficial to the urine and the menses. *Heleoselinum* (marsh celery) is especially valuable for the bites of spiders; this variety and *oreoselinum* taken in wine promotes the menses.

XLVII. Another kind of parsley, which grows on rocks, is called by some *petroselinum* (rock parsley); it is especially good for abscesses, two spoonfuls of the juice making a dose with one cyathus of juice of horehound and three cyathi of warm water.

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buselinum differens brevitae caulis a sativo et radicis colore rufo, eiusdem effectus. praevalere contra serpentes potu et inlitu.

- 119 XLVIII. Ocimum quoque Chrysippus graviter increpuit inutile stomacho, urinae, oculorum quoque claritati, praeterea insaniam facere et lethargos et iocineris vitia, ideoque capras id aspernari, hominibus quoque fugiendum censens. addunt quidam tritum, si operiatur lapide, scorpionem gignere, comman-
- 120 ducatum et in sole positum vermes, Afri vero, si eo die feriatur quispiam a scorpione quo ederit ocimum, non posse servari. quin immo tradunt aliqui manipulo ocimi cum cancris x marinis vel fluviatilibus trito convenire ad id scorpiones ex proximo omnes.
- 121 Diodorus in empiricis etiam pediculos facere ocimi cibum. secuta aetas acriter defendit, nam id esse capras, nec cuiquam mentem motam, et scorpionum terrestrium ictibus marinorumque venenis mederi ex vino addito aceti exiguo. usu quoque conpertum deficientibus ex aceto odoratu salutare esse, item lethargicis et inflammatis refrigerationi,¹ inlitum capitis doloribus cum rosaceo aut myrteo aut aceto,
- 122 item oculorum epiphoris inpositum ex vino. stomacho quoque utile inflationes ructu ex aceto dissolvere sumptum, alvum sistere inpositum, urinam

¹ refrigeratione coni. Mayhoff.

^a *Lethargus* was the comatose form of malaria, but seems to have been also used of any disease accompanied by coma.

^b "Empiric writings," i.e. of the Empiric School. Here perhaps "Empiric prescriptions."

Other authorities have added to the parsleys buse- *Cow parsley.*
linum (cow parsley), which differs from the cultivated
kind in the shortness of its stalk and the redness of
its root, although its properties are the same. They
add that taken in drink or applied it is a powerful
antidote against the bites of serpents.

XLVIII. Ocimum (basil) too was severely condemn- *Basil.*
ed by Chrysippus as injurious to stomach, urine and
eyesight, adding that it causes madness, lethargus ^a
and liver troubles, and that for this reason goats
refuse to touch it, so that men also ought to avoid
it. Certain authorities add that pounded ocimum,
if covered by a stone, breeds a scorpion, and that
ocimum chewed and left in the sun breeds worms;
the Africans moreover hold that a man's life is lost if
he is stung by a scorpion on the same day as he has
eaten ocimum. Moreover, some hold that if a
handful of ocimum be pounded up with ten sea or
river crabs, all the scorpions in the neighbourhood
are drawn to it. Diodorus in his *Empirica* ^b says
that the use of ocimum as a food breeds lice. The
period that followed saw strong defenders of ocimum,
who said that goats do eat it, that no man's mind
has been affected by it, and that in wine and a little
vinegar it cures the stings of land scorpions and the
venom of those in the sea. Experience also proves,
they say, that ocimum if smelt in vinegar is good for
fainting; also for lethargus, and to cool inflam-
mations; for headache, too, if used as a liniment
with rose oil or with myrtle oil or with vinegar, and
for eye fluxes if applied in wine. It is said too, to
be beneficial to the stomach, to disperse flatulence
by belching if taken in vinegar, to check looseness
of the bowels if applied externally, to be diuretic,

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- ciere, sic et morbo regio et hydropicis prodesse, etiam choleris destillationes stomachi inhiberi. ergo etiam coeliacis Philistio dedit, et coctum dysintericis, et contra Plistonicum¹ aliqui et in tenesmo et sanguinem excreantibus in vino, duritia quoque praecordiorum. inlinitur mammis extinguitque² lactis
 123 proventum. auribus utilissimum infantium, praecipue cum adipe anserino. semen tritum et haustum naribus sternumenta movet³ et destillationes quoque capitis inlitum, vulvas purgat in cibo ex aceto. verrucas mixto atramento sutorio tollit. venerem stimulat, ideo etiam equis asinisque admissurae tempore ingeritur.
- 124 Silvestri ocimo vis efficacior ad eadem omnia, peculiaris ad vitia quae vomitionibus crebris contrahuntur vomicasque volvae, contra bestiarum morsus e vino radice efficacissima.
- 125 XLIX. Erucae semen scorpionum venenis et muris aranei medetur, bestiolas omnes innascentes corpori arcet, vitia cutis in facie cum melle inlitum, lentigines ex aceto, cicatrices nigras reducit ad candorem cum felle bubulo. aiunt verbera subituris potum ex vino
 126 duritiam quandam contra sensum induere. in condiendis opsoniis tanta est suavitas ut Graeci euzomon appellaverint. putant, subtrita eruca si foveantur oculi, claritatem restitui, . . . tussim⁴ infantium

¹ Plistonicum *codd.*: Plistonicus *vetus editio et Mayhoff*, *q̄* post contra lacunam indicat.

² extinguitque *codd. et Detlefsen*: exinanitque *Mayhoff*, *coll. Dioscoridis γάλακτος προκλητικόν*: elicitque *coni. Warmington*.

³ movet *aut om. codd.*: compescit *Mayhoff coll. Gargilio*.

⁴ Ante tussim lacunam indicat *Mayhoff*.

applied thus to be good for both jaundice and dropsy, and to check even the diarrhoea of cholera. Philistion therefore prescribed ocimum even for coeliac complaints and when boiled for dysentery; some against the advice of Plistonicus prescribe it in wine for tenesmus, spitting of blood and hardness of the hypochondria. Applied to the breasts it checks^a the flow of milk. It is very beneficial, especially with goose grease, for the ears of babies. The pounded seed snuffed up the nostrils promotes^b sneezing, and used as a liniment the flow of mucus from the head; taken as food in vinegar it purges the womb. Mixed with cobbler's blacking it removes warts. Being aphrodisiac it is also administered to horses and asses at the time of service.

For all these purposes wild ocimum is of greater efficacy, particularly for the troubles caused by frequent vomitings and for abscesses of the womb, the root taken in wine being very efficacious for the bites of wild beasts.

XLIX. Rocket seed cures the poisons of scorpions *Rocket.* and of the shrew-mouse; it keeps off all the little parasites breeding on the body, and removes spots on the skin of the face when applied with honey, freckles when applied with vinegar, reducing livid scars to whiteness when mixed with ox-gall. Taken in wine it is said to harden as it were the feeling of those about to be flogged. As a seasoning for dishes it imparts such a pleasant flavour that the Greeks have called it euzomon (good broth). It is thought that if the eyes are fomented with slightly pounded rocket, clearness of vision is restored . . . the

^a *Exinanit* would mean "drains," i.e. "promotes."

^b *Compescit* would mean "checks."

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sedari. radix eius in aqua decocta fracta ossa extrahit. iam¹ de venere stimulanda diximus tria folia silvestris erucae sinistra manu decerpta et trita in aqua mulsa si bibantur.

- 127 L. E contrario nasturtium venerem inhibet, animum exacuit, ut diximus. duo eius genera. album alvum purgat, detrahit bilem potum X pondere in aquae vii. strumis cum lomento inlitum oper-
tumque brassica praeclare medetur. alterum est nigrius, quod capitis vitia purgat, visum compurgat, commotas mentes sedat ex aceto sumptum, lienem ex vino potum vel cum fico sumptum, tussim ex melle.
- 128 si cotidie ieiuni sumant. semen ex vino omnia intestinorum animalia pellit, efficacius addito mentastro. prodest et contra suspiria et tussim cum origano et vino dulci, pectoris doloribus decoctum in lacte caprino. panos discutit cum pice extrahitque corpori aculeos et maculas inlitum ex aceto, contra
- 129 carcinomata adicitur ovorum album. et lienibus inlinitur ex aceto, infantibus vero e melle utilissime. Sextius adicit ustum serpentes fugare, scorpionibus resistere, capitis dolores contrito, alopecias emendari addito sinapi, gravitatem aurium trito inposito auribus cum fico, dentium dolores infuso in aures suco, por-

¹ iam ego: nam codd.: lacunam post extrahit Mayhoff, post diximus Hard.

coughing of babies is soothed. A decoction of its root in water extracts broken bones. We have already spoken of rocket as an aphrodisiac;^a if three leaves of wild rocket plucked with the left hand and pounded are drunk in hydromel, they so act.

L. On the other hand cress is antaphrodisiac, but *Cress.* as we have already said ^b sharpens the senses. There are two varieties of it. The white acts as a purge, and carries bile away if one denarius by weight of it be taken in seven of water. It is an excellent cure for scrofula if applied with bean meal and covered with a cabbage leaf. The other kind, which is darker, purges away peccant humours of the head, clears the vision, calms if taken in vinegar troubled minds, and benefits the spleen when drunk in wine or eaten with a fig, or a cough if taken in honey, provided that the dose be repeated daily and administered on an empty stomach. The seed in wine expels all parasites of the intestines, more effectively however if there be added wild mint. Taken with wild marjoram and sweet wine it is good for asthma and cough, and a decoction in goat's milk relieves pains in the chest. Applied with pitch it disperses superficial abscesses; applied in vinegar it extracts thorns from the body and removes spots. When used for carcinoma white of egg is added. It is applied in vinegar to the spleen, but with babies it is best applied in honey. Sextius adds that burnt cress keeps away serpents, and neutralizes scorpion stings; that the pounded plant relieves head-ache, and mange, if mustard be added; that pounded and placed with fig on the ears it relieves hardness of hearing, and toothache if its juice be poured into the

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- riginem et ulcera capitis cum adipe anserino. furunculos concoquit cum fermento. carbunculos ad suppurationem perducit et rumpit, phagedaenas ulcerum expurgat cum melle. coxendicibus et lumbis cum polenta ex aceto inlinitur, item licheni, unguibus scabris, quippe natura eius caustica est. optimum autem Babylonium, silvestri ad omnia ea effectus maior.
- 131 LI. In praecipuis autem medicaminibus ruta est. latiora sativae folia, rami fruticosiores. silvestris horrida ad effectum est et ad omnia acrior. sucus exprimitur tunsae aspersa modice aqua, et in pyxide Cypria adservatur. hic copiosior datus veneni noxiam obtinet, in Macedonia maxime iuxta flumen Aliacmonem, mirumque, cicutae suco extinguitur:
- 132 adeo etiam venenorum venena sunt. cicutae sucus prodest manibus et faciei colligentium rutam. cetero inter prima miscetur antidotis, praecipueque Galatica. quaecumque autem ruta et per se pro antidoto valet foliis tritis ex vino sumptis, contra aconitum maxime et viscum, item fungos, sive in potu detur sive in cibo. simili modo contra serpentium ictus, utpote cum mustelae dimicaturae
- 133 cum his rutam prius edendo muniant se. valent et contra scorpionum et contra araneorum, apium, crabronum, vesparum aculeos et cantharidas ac salamandras canisve rabiosi morsus. acetabuli mensura

* Spanish fly.

ears; and that dandruff and sores on the head are removed if the juice be applied with goose grease. Boils it brings to a head if applied with leaven. It makes carbuncles suppurate and break, and with honey it cleanses phagedaenic ulcers. With pearl barley it is applied in vinegar for sciatica and lumbago, likewise for lichen and rough nails, because its nature is caustic. The best kind, however, is the Babylonian; the wild variety for all the purposes mentioned is the more efficacious.

LI. But among our chief medicinal plants is rue. *Rue.* The cultivated kind has the wider leaves and the more bushy branches; the wild variety is harsh in its effects and sharper in all respects. The juice is extracted by pounding with a moderate sprinkling of water, and is kept in a copper box. An overdose of this juice possesses poisonous qualities, especially in Macedonia near the river Aliacmon. Strangely enough, it is neutralized by the juice of hemlock; so there are actually poisons of poisons, and hemlock juice is good for the hands and face of those who gather rue. Further, rue, especially the Gallic variety, is one of the chief ingredients of antidotes. Any sort of rue, however, is even by itself a powerful antidote, the pounded leaves being taken in wine, especially against aconite and mistletoe; likewise, whether given in drink or in food, against poisonous fungi. In like manner it counteracts the bites of serpents, seeing that weasels, when about to fight with them, first protect themselves by eating rue. Rue is good for stings of scorpions and for those of spiders, bees, hornets and wasps, for injuries caused by cantharides^a and salamanders, and for the bites of mad dogs. The juice is drunk in wine in doses of

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sucus e vino bibitur, et folia trita vel commanducata inponuntur cum melle ac sale vel cum aceto et pice decocta, suco perunctos et eum habentes negant feriri ab his maleficis, serpentesque, si uratur ruta, 134 nidorem fugere. efficacissima tamen est silvestris radix cum vino sumpta. eandem adiciunt efficaciorum esse sub diu potam. Pythagoras et in hac marem minoribus herbaceisque coloris foliis a femina discrevit, ea laetioribus foliis et colore. idem oculis noxiam putavit, falsum, quoniam scalptores et pictores hoc cibo utuntur oculorum causa cum pane vel nasturtio, caprae quoque silvestres propter visum, 135 ut aiunt. multi suco eius cum melle Attico inuncti discusserunt caligines, vel cum lacte mulieris puerum enixae, vel puro suco angulis oculorum tactis. epiphoras cum polenta inposita lenit; item capitis dolores pota cum vino aut cum aceto et rosaceo inlita, si vero sit cephalaea, cum farina hordeacea et aceto. eadem cruditates discutit mox et inflationes, dolores stomachi veteres. vulvas aperit corrigisque conuersas inlita in melle toto ventre et pectore, hydropicis cum fico et decocta ad dimidias partes potaque ex vino. sic bibitur et ad pectoris dolores laterumque et lumborum, tusses, suspiria, pulmonum, iocinerum, renium vitia, horrores frigidus. ad crapulae gravedines decocuntur folia

one acetabulum, and the leaves pounded or chewed are applied with honey and salt, or after boiling with vinegar and pitch. It is said that any besmeared with its juice, and even those having it on their persons, are never stung by these poisonous creatures, and that serpents avoid the fumes that come from burning rue. Its most efficient form is the wild root taken with wine. Authorities add that this root is more efficacious if the draught be taken out of doors. Pythagoras divided rue also into (*a*) male, with smaller leaves and of a grass-green colour, and (*b*) female, with more luxuriant leaves and more colour. He also thought it injurious to the eyes, wrongly, since engravers and painters use rue as food, with bread or cress, for the sake of their eyes; wild goats also, they say, eat it to improve their vision. Many have dispelled dimness by anointing the eyes with its juice added to Attic honey or to the milk of a woman who has just borne a male child, or even by touching the corners of the eyes with the pure juice. Rue applied with pearl barley relieves fluxes from the eyes; taken in wine or applied with vinegar and rose oil, headaches likewise; if however the headache be chronic, barley flour and vinegar should be the other ingredients. The same plant soon relieves indigestion, flatulence and chronic pains of the stomach. It opens the womb, and corrects displacement of it, if applied in honey to the whole abdomen and chest; added to figs and boiled down to one half it is administered in wine in cases of dropsy. In this form it is also taken for pains in the chest, sides and loins, for coughs and asthma, for complaints of the lungs, liver and kidneys, and for cold shivers. To prevent the after-effects

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poturis. et in cibo vel cruda vel decocta conditave
 prodest, item torminibus in hysopo decocta et cum
 137 vino. sic et sanguinem sistit interiorem et narium
 indita, sic et conlutis dentibus prodest. auribus
 quoque in dolore sucus infunditur, custodito, ut
 diximus, modo in silvestri, contra tarditatem vero
 sonitusque cum rosaceo vel cum laureo oleo aut
 138 cum vino¹ et melle. sucus et phreneticis ex aceto
 tritae instillatur in tempora et cerebrum. adiecerunt
 aliqui et serpyllum et laurum inlinentes capita et
 colla. dederunt et lethargicis ex aceto olfaciendum,
 et comitialibus bibendum decoctae sucum in cyathis
 quattuor; ante accessiones quarum frigus intolera-
 139 bile est alsiosisque et crudam in cibo. urinam
 quoque vel cruentam pellit, feminarum etiam purga-
 tiones secundasque, etiam emortuos partus, ut
 Hippocrati videtur, ex vino dulci nigro pota itaque
 inlita. et vulvarum causa et suffire iubet. Diocles
 et cardiacis inponit ex aceto et melle cum farina
 hordeacia, et contra ileum decocta farina in oleo
 velleribus collecta. multi vero et contra purulentas
 excreationes siccae drachmas duas, sulphuris unam et
 dimidiam sumi censent, et contra cruentas ramos tres
 140 decoctos in vino. datur et dysintericis cum caseo

¹ cum vino *Mayhoff*: cumino *codd.*

^a See p. 8 and pp. xiii-xiv.

^b See p. 70 note ^a and pp. xiii-xiv.

of drinking a decoction of the leaves is taken before indulgence in wine. It is beneficial as a food, raw, boiled or preserved, likewise for colic if boiled in hyssop and taken with wine. In this form it checks internal haemorrhage, and, if injected into them, bleeding nostrils; this form is also good for rinsing the teeth. The juice is also poured into the ears for ear-ache, care being taken, as we have said, to inject only a moderate quantity if the wild variety is used; but for hardness of hearing and for singing in the ears there is added rose oil or bay oil, or else wine and honey. For phrenitis^a too the juice of pounded rue is poured in vinegar over the temples and cranium. Some have also added wild thyme and bay, rubbing with this mixture the head and the neck. Rue has been given in vinegar for sufferers from lethargus^b to smell, and a decoction of the juice for epileptics to drink in doses of four cyathi; it has been given before attacks of fever with unbearable chill, and also raw, as food, to sufferers from shivering fits. It is diuretic also, even when there is haematuria; it promotes too menstruation, and brings away the after-birth and the foetus that has died before delivery, as Hippocrates holds, if it be taken in sweet, dark wine, or so applied locally. He also prescribes fumigation with rue to stimulate the womb. Diocles also applies it in vinegar and honey with barley meal for heart-burn: for severe colic, the meal should be boiled in oil and spread over pieces of fleece. Many moreover also think that two drachmae of dried rue and one and a half drachmae of sulphur can be taken for purulent spittings, and for spitting of blood three sprays boiled in wine. Pounded and taken in wine with cheese it is also given to patients with

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- in vino contrita. dederunt et cum bitumine infriatam potioni propter anhelitum, ex alto lapsis seminis tres uncias olei libra vinique sextario. inlinitur cum oleo coctis foliis partibus quas frigus adusserit. si urinam movet, ut Hippocrati videtur, mirum est quosdam dare velut inhibentem potui,
- 141 contra incontinentiam urinae. psoras et lepras cum melle et alumine inlita emendat, item vitiligines, verrucas, strumas et similia cum trychno et adipe suillo ac taurino sebo, ignem sacrum ex aceto et oleo vel psimithio, carbunculum ex aceto. nonnulli laserpicium una inlini iubent, sine quo epinyctidas pusulas curant. inponunt et mammis turgentibus decoctam et pituitae eruptionibus cum cera, testium
- 142 vero epiphoris cum ramis laureae teneris, adeo peculiari in visceribus his effectum ut silvestri ruta cum axungia veteri inlitos ramices sanari prodant, fracta quoque membra semine trito cum cera inposito. radix rutae sanguinem oculis suffusum et toto corpore cicatrices aut maculas inlita emendat. ex reliquis quae traduntur mirum est, cum ferventem rutae naturam esse conveniat, fasciculum eius in rosaceo decoctum addita aloes uncia perunctis sudorem reprimere, itemque generationem inpediri
- 143 hoc cibo. ideo in profluvio genitali datur et venerem crebro per somnia imaginantibus. praecavendum est gravidis abstineant hoc cibo, necari enim partus

^a See § 44 pp. 28-29 and p. viii.

dysentery. Crumbed into a draught it has also been given with bitumen for shortness of breath; for heavy falls three ounces of seed with one pound of oil and a sextarius of wine. The leaves boiled with oil are applied to parts that have been bitten by frost. If it is diuretic, as Hippocrates holds, it is strange that some prescribe it as an antidiuretic drink for incontinence of urine. An application of rue, with honey and alum, heals itch and leprous sores; vitiligo also and warts, scrofula and similar complaints, with nightshade, lard and beef suet; in vinegar and oil, or white lead, erysipelas; in vinegar, carbuncles. Some prescribe the addition of silphium to the ointment, without using it, however, for the treatment of night pustules.^a A decoction of it is applied to swollen breasts, and with the addition of wax for outbursts of phlegm; for fluxes of the testicles, however, tender sprigs of laurel are added, and so extraordinary is the effect of these on the abdomen that, it is said, by an ointment of the wild variety with old axle-grease hernia is healed, as are also broken limbs by an application of the pounded seed and wax. The root of rue applied to the part affected restores to normal blood-shot eyes, and scars or spots on any part of the body. Of the other traditions about rue a remarkable one is that, although it is agreed that rue is by nature hot, yet a bunch of rue boiled in rose oil with one ounce of aloes checks the perspiration of those who have rubbed themselves with it, and that its use as food hinders the generative powers. Accordingly it is prescribed for spermatorrhoea and for frequent amorous dreams. Pregnant women must take care to exclude rue from their diet, for I find that the

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invenio. eadem ex omnibus satis quadripedum quoque morbis in maximo usu est, sive difficile spirantibus sive contra maleficorum animalium ictus, infusa per nares ex vino aut, si sanguisugam hauserint, ex aceto, et quocumque in simili morborum genere ut in homine temperata.

- 144 LII. Mentastrum silvestris menta est differens specie foliorum quae sunt figura ocimi, pulei odore,¹ propter quod quidam silvestre puleium vocant. his commanducatis et inpositis sanari elephantiasin Magni Pompei aetate fortuito cuiusdam experimento propter pudorem facie inlita conpertum est.
- 145 eadem inlinuntur bibunturque adversus serpentium ictus drachmis duabus in vini cyathis duobus, adversus scorpionum cum sale, oleo, aceto, item adversus scolopendras ius decocti. adversus omnia venena servantur folia arida ad farinae modum. substratum vel accensum fugat etiam scorpiones.
- 146 potum feminas purgat, sed partus necat. ruptis, convulsis, orthopnoicis, torminibus, choleris efficacissimum, item lumbis, podagris inpositum. sucus auribus verminosis instillatur. in regio morbo bibitur, strumis inlinitur, somnia veneris inhibet, taenias pellit ex aceto potum, contra porriginem ex aceto infunditur capiti in sole.

- 147 LIII. Mentae ipsius odor animum excitat et sapor

¹ odore *Mayhoff*, *Cornarium* et *Dioscoridem* secutus : colore *codd.*

^a A kind of multipede.

foetus is killed by it. Of all plants rue is the one most generally used for the diseases of quadrupeds also, whether it be difficulty of breathing or the bites of noxious creatures; it is injected through the nostrils in wine, or in vinegar if a bloodsucker has been swallowed; in any type of illness it is compounded as in the corresponding illness in man.

LII. *Mentastrium* is wild mint, differing from the cultivated kind in the appearance of its leaves, which have the shape of those of *ocimum* and the smell of pennyroyal, for which reason some call it wild pennyroyal. If these leaves are chewed and applied, elephantiasis is cured, as was discovered in the time of Pompeius Magnus by the chance experiment of some one who for shame smeared his face with them. The same leaves are applied, or taken in drink, for the bites of serpents, in doses of two drachmae in two cyathi of wine, for the stings of scorpions with salt, oil and vinegar; for the wound of the scolopendra^a the juice of a decoction is used. The leaves are dried to a powder and kept as an antidote for all poisons. Spread out or burnt, the plant drives away even scorpions. Taken in drink it brings on menstruation, but it kills the foetus. For ruptures, spasms, orthopnoea, cholic and cholera it is very beneficial, and an external application is so for lumbago and gout. The juice is injected into ears that are infected with parasites. It is taken in drink for jaundice, and applied as ointment for scrofula; it prevents amorous dreams, and if taken in vinegar expels worms; for dandruff, vinegar with the plant in it is poured over the head in the sun.

LIII. The smell of mint by itself refreshes our *Mint*.

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- aviditatem in cibis, ideo embammatum mixturae familiaris. ipsa acescere aut coire denserique lac non patitur, quare lactis potionibus additur, et his qui¹ coagulati potu strangulentur, data in aqua aut mulso. eadem vi resistere et generationi creditur
- 148 cohibendo genitalia denseri.² aequae maribus ac feminis sistit sanguinem, et purgationes feminarum inhibet, cum amylo ex aqua pota coeliacorum impetus. exulcerationem³ et vomicas vulvae curant illita,⁴ iocinerum vitia ternis obolis ex mulso datis, item sanguinem excreantibus in sorbitione. ulcera in capite infantium mire sanat, arterias umidas
- 149 siccant, siccas adstringit, pituitas corruptas purgat in mulso et aqua, voci suco utilis, sub certamine dumtaxat, qui et gargarizatur uva tumente adiecta ruta et coriandro ex lacte. utilis et contra tonsillas cum alumine, linguae asperae cum melle et convulsis intus per se vitiisque pulmonis. singultus et vomitiones sistit cum suco granati, ut Democritus
- 150 monstrat. recentis sucus narium vitia spiritu subductus emendat; ipsa trita choleras, in aceto quidem pota, sanguinis fluctiones intus, ileum etiam inposita cum polenta et si mammae tendantur. inlinitur et temporibus in capitis dolore, sumitur et contra scolopendras et scorpiones marinos et ad serpentes. epiphoris inlinitur et omnibus in capite eruptionibus,

¹ et his qui *Mayhoff*: et his *codd.*: ne huius *vulg.*

² *Num punctum post feminis ponendum?*

³ exulcerationem *Mayhoff*: e ratione, iratione, si rationem *codd.*: Serapion et Dalion *coniecturae*.

⁴ curant illita *Mayhoff*: curavit illa *plurimi codd. et Delfsen*.

^a Or, "thicken in both men and women," if the stop be transferred so as to follow *feminis*.

spirits and its flavour gives a zest to food; for this reason it is a familiar ingredient in our sauces. By itself mint prevents milk from turning sour or curdled and thick; for which reason it is added to milk for drinking, and administered in water or in honey wine to such as are choked by a curdled draught. Through the same property it is believed to be a hindrance to generation by not allowing the genital fluids to thicken.^a Bleeding it checks in both men and women, and stays menstruation; violent disturbance of the bowels also, if taken in water with starch. Ulceration and abscess of the womb are healed by an external application, liver complaints by doses of three oboli in honey wine, spitting of blood by the same in broth. It is wonderfully good for curing sores on children's heads; it dries a wet and braces a dry trachea, in honey wine and water it clears away purulent phlegm, and benefits the voice, if its juice be taken just before a strain is put upon it, not otherwise; a gargle also of the juice added to rue and coriander in milk is good for a swollen uvula. With alum it is good for the tonsils, with honey for a rough tongue, and by itself for internal spasms and for lung complaints. With pomegranate juice, as Democritus tells us, it stops hiccough and vomitings. The juice of fresh mint, inhaled, is good for affections of the nostrils. Pounded by itself mint is good for cholera, taken in a draught of vinegar, for internal fluxes of blood, made into a plaster with pearl barley, for iliac trouble also and tension of the breasts. It is also applied to the temples for headache, and it is taken for the wounds caused by the scolopendra, sea scorpion and serpent. It is applied to fluxes of the eyes, to all eruptions on the

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- 151 item sedis vitiis. intertrigines quoque, vel si ten-
eatur tantum, prohibet. auribus instillatur cum
mulso. aiunt et lieni mederi eam in horto gustatam
ita ne vellatur, si is qui mordeat dicat se lieni mederi,
per dies viii, aridae quoque farinam tribus digitis
adprehensam et stomachi dolorem sedare in aqua
et similiter aspersa potione¹ ventris animalia expel-
lere.
- 152 LIV. Magna societas cum hac ad recreandos
defectos animo puleio cum surculis suis in ampullas
vitreas aceti utrisque deiectis. qua de causa dignior
e puleio corona Varroni quam e rosa cubiculis nostris
pronuntiata est, nam et capitis dolores inposita
dicitur levare, quin et olfactu capita tueri contra
frigorū aestusque iniuriam et ab siti traditur, neque
aestuari eos qui duos e puleio surculos inpositos
auribus in sole habeant. inlinitur etiam in doloribus
- 153 cum polenta et aceto. femina efficacior. est autem
haec flore purpureo. mas candidum habet. nausias²
cum sale et polenta in frigida aqua pota inhibet,
sic et pectoris³ dolorem, stomachi autem ex aqua.
item rosiones sistit et vomitiones cum aceto et
polenta, alvum solvit ex sale et aceto et polenta.
intestinorum vitia melle decocta et nitro sanat;
urinam pellit ex vino et, si Amineum sit, et calculos
- 154 et interiores omnes dolores. ex melle et aceto
sedat menstrua et secundas, vulvas conversas cor-

¹ potioni *Sillig*: in potionem *vulg.*

² *Ante nausias legitur in in codd.*: item *Mayhoff.*

³ *Post pectoris vulg. et Detlefsen ac ventris add.*

^a The emendations would mean "sprinkled into drink."

^b Perhaps, "purple." There is nearly always a difficulty
in translating *purpureus*.

head, and to rectal troubles. It prevents too chafing, even if only held in the hand. Added to honey wine it is poured into the ears. It is even said to cure splenic trouble if it be tasted in the garden, without plucking it, if he who bites it says on nine consecutive days that he is curing his spleen; also that a three-finger pinch of the dried powder taken in water relieves stomach ache, and that the same with a sprinkling of drink^a expels intestinal worms.

LIV. Pennyroyal and mint are strong allies in *Pennyroyal*. reviving people who have fainted, both being put, in whole sprays, into glass bottles full of vinegar. For this reason Varro declared that a garland of pennyroyal was more suited to our bedrooms than one of roses, for an application is said to relieve headache; moreover, its very smell protects the head, so it is reported, against injury from cold or heat, and from thirst, nor do they suffer from the heat who carry when they are in the sun two sprays of pennyroyal behind their ears. It is also applied with pearl barley and vinegar for pains. The female plant is the more efficacious. This has a mauve^b flower, but the male a white one. Taken in cold water with salt and pearl barley it checks nausea; in this form pains in the chest also, and in water by itself pains in the stomach. Likewise it checks gnawings and vomiting if taken with vinegar and pearl barley; in salt, vinegar and pearl barley it loosens the bowels. Boiled with honey and soda it cures complaints of the intestines; in wine it is diuretic, and if the wine be Aminean^c it disperses both stone and all internal pains. In honey and vinegar it relieves menstruation and the after-birth, replaces

^a See XIV. §§ 46, 47.

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- 155 rigit, defunctos partus eicit. semen obmutescentibus
 olfactu admovetur, comitialibus in aceto cyathi
 mensura datur. si aquae insalubres bibendae sint,
 tritum aspergitur. lassitudines¹ corporis, si cum
 vino datur,² minuit, nervorum causa et in contrac-
 156 thotono. bibitur ad serpentium ictus decoctum, ad
 scorpionum in vino tritum, maxime quod in siccis
 nascitur. ad oris exulcerationes, ad tussim efficax
 habetur. flos recentis incensus pulices necat odore.
 Xenocrates pulei ramum lana involutum in tertianis
 ante accessionem olfactandum dari aut stragulis
 subici et ita collocari aegrum inter remedia tradit.
 157 LV. Silvestri ad eadem vis efficacior. simile est
 origano, minoribus foliis quam sativum, et a quibus-
 dam dictamnus vocatur. gustatum a pecore capris-
 que balatum concitat, unde quidam Graeci littera
 mutata blechonem vocaverunt. natura tam fervens
 est ut inlitas partes exulceret. tuso³ in perfrictione
 fricari ante balinea convenit, et ante accessionum
 157 horrorem. convulsis et torminibus, podagris mire

¹ lassitudines *Hard.*: salsitudines *codd.*

² datur *vulg.*: *aliae lectiones tractetur, troctetur, tradetur.*
Mayhoff scribit lassitudines, omnino tractetur, e melle.
Fortasse cum melle malis. Textus est corruptus sed sensus
clarus. Nervorum causa et in contractione difficile.

³ tuso *cum duobus codd.* *Mayhoff*: tussi *cum uno Deilefsen.*

^a Apparently "cramp." There is much to be said for Mayhoff's reconstruction: "treat the body all over for tiredness etc." The *et* may be: "even when they are cramped."

^b βλήχων from βληχῶμαι, supposedly. Really, βλήχων is the Attic form of the Ionic γλήχων, and its connection with βληχῶμαι is an instance of "popular etymology."

displaced uterus and expels the dead foetus. Its seed is given to smell in cases of aphasia; to epileptics it is administered with vinegar in doses of one cyathus. If unwholesome water has to be drunk, pounded pennyroyal is sprinkled on it. It relieves physical tiredness if taken in wine; it is rubbed with salt and vinegar on the sinews, and when these are contracted,^a and with honey for opisthotonic tetanus. A decoction is drunk for serpent bites; pounded it is taken in wine for stings of scorpions, especially if the pennyroyal be grown on dry soil. It is supposed to be good for ulcerations of the mouth, and for cough. The flower of the freshly gathered plant, when burnt, kills fleas by its smell. Xenocrates includes in his prescriptions the administering of a sprig of pennyroyal wrapped in wool to be smelt by sufferers from tertian ague before an attack of fever, or its being placed under the bedclothes for the patient to lie on.

LIV. Wild pennyroyal has for the same purposes *wild pennyroyal* as I have mentioned yet more beneficial properties. It is like wild marjoram, has smaller leaves than cultivated pennyroyal, and by some is called dictamnus (dittany). Its taste incites sheep or goats to bleat; for this reason certain Greeks changing one letter only have named it blechon.^b Its nature is so heating that it raises a blister on the parts of the body to which it is applied. It does a chill^c good for the patient to be rubbed with pounded pennyroyal before a bath, as well as before the shivering fit of attacks of ague. For convulsions and gripings of the bowels, and for gout, it is wonder-

^a Or, with the reading *tussi*: "it does the cough good, in a chill, for the patient to be rubbed with pennyroyal etc."

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clari inter magistros dicendi adsectatores similitudinem coloris studiis contracti imitatos, et paulo ante Iulium Vindicem adsertorem illum a Nerone libertatis captationi testamenti sic lenocinatum. narium sanguinem pastillis inditum vel ex aceto recens sistit et oculorum epiphoris per se inpositum, 161 tumentibus cum melle prodest. infantibus inponi in ventre satis est. morbo regio in vino albo a balineis datur. Aethiopicum maxime in posca et in ecligmate cum melle. Africano privatim urinae incontinentiam cohiberi putant. sativum datur ad iocineris vitia tostum, tritum in aceto, item ad vertiginem; is vero quos acrior urina mordeat in dulci tritum, ad vulvarum vitia in vino, praeterque inpositis vellere foliis, testium tumoribus tostum 162 tritumque cum melle aut cum rosaceo et cera. silvestre ad omnia eadem efficacius, praeterea ad serpentes cum oleo, ad scorpiones, scolopendras. sistit et vomitionem nausiasque ex vino quantum adprehenderint tres digiti. propter colum quoque bibitur inliniturque vel penicillis fervens, adprimitur fasciis. strangulationes vulvae potum in vino aperit tribus drachmis in tribus cyathis vini. auribus instillatur ad sonitus atque tinnitus cum sebo vitulino vel melle. suggillatis inlinitur cum

reported that the followers of Porcius Latro, a distinguished teacher of rhetoric, imitated by this means the pallor that had followed his close application to study; and not so long ago Julius Vindex, the famous supporter of freedom against Nero, flattered in this way the hopes of legacy-hunters. Applied in the form of lozenges or fresh in vinegar it arrests bleeding at the nose; applied by itself it is good for fluxes from the eyes, and applied with honey it is good for them when swollen. For babies it is sufficient for it to be placed upon the abdomen. For jaundice it is administered in white wine after bathing. Ethiopian cummin is given chiefly in vinegar and water, and in an electuary with honey. The African variety is thought to have the special quality of checking incontinence of urine. Cultivated cummin, parched, and beaten up in vinegar, is given for troubles of the liver, likewise for vertigo; pounded moreover it is given in sweet wine to those who smart from too acrid urine; for disorders of the womb, in wine, and besides with an application of the leaves wrapped up in wool; for swollen testes it is parched and pounded, and applied with honey or with rose oil and wax. For all these purposes wild cummin is more efficacious; moreover with oil it is so for bites of serpents, and for stings of scorpions and scolopendras. A three-finger pinch in wine checks vomiting and nausea. For colic also it is drunk, or applied hot in lint kept in its place by bandages. Taken in wine it opens up suffocations of the womb, the dose being three drachmae of cummin in three cyathi of wine. It is poured into the ears with veal suet or honey, when there are noises or ringing in them. For bruises it is applied

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melle et uva passa et aceto, lentigini nigrae ex aceto.

- 163 LVIII. Est cumino simillimum quod Graeci vocant ami. quidam vero Aethiopicum cuminum id esse existimant. Hippocrates regium appellavit, videlicet quia efficacius Aegyptio iudicavit. plerique alterius naturae in totum putant, quoniam sit exilius et candidius. similis autem et huic usus. namque et panibus Alexandrinis subicitur et condimentis
- 164 interponitur. inflationes et tormina discutit, urinas et menstrua ciet, suggillata, oculorum epiphoras mitigat, cum lini semine scorpionum ictus in vino potum drachmis duabus privatimque cerastarum cum pari portione myrrae. colorem quoque bibentium similiter mutat in pallorem. suffitum cum uva passa aut resina vulvam purgat. tradunt facilius concipere eas quae odorentur id per coitum.
- 165 LIX. De cappari satis diximus inter peregrinos frutices. non utendum transmarino, innocentius est Italicum. ferunt eos qui cotidie id edunt¹ paralysi non periclitari nec lienis doloribus. radix eius vitiliginis albas tollit, si trita in sole fricentur.
- 166 splenicis prodest in vino potus radicis cortex duabus drachmis, dempto balnearum usu, feruntque xxxv diebus per urinam et alvum totum lienem emitti.

¹ edunt *codd.*: edint *C. F. W. Müller, Mayhoff.*

^a Ajowan = *Carum copticum.*

^b See p. 108, n. a.

^c The horned viper.

^d See XIII. § 127.

with honey, raisins and vinegar, for black freckles in vinegar.

LVIII. There is a plant very like cummin which the *Ami.* Greeks call *ami*.^a Some authorities however consider that it is Ethiopian cummin. Hippocrates called it royal cummin, doubtless because he thought that it was more efficacious than the Egyptian. Most people think that it is of an entirely different nature from cummin, because it is thinner and whiter. Yet its use is similar to that of cummin, for it is put under loaves of bread ^b at Alexandria and included among the ingredients of Alexandrian sauces. It dispels flatulence and griping, promotes urine and menstruation, relieves bruises and fluxes of the eyes, and taken in wine with linseed in doses of two drachmae it is good for the wounds of scorpions, and with an equal proportion of myrrh it is especially good for the bite of the cerastes.^c Like cummin it produces pallor in the complexion of those who drink it. A fumigation of it with raisins or resin acts as a purge upon the womb. It is believed that those women more easily conceive who smell the plant during sexual intercourse.

LIX. I have said enough about the caper in the *Caper.* treatment of foreign plants.^d The caper growing overseas is not to be used; that of Italy is less harmful. They say that those who eat capers daily run no risk of paralysis or of pains in the spleen. Its root, pounded and rubbed on the skin in the sun, removes white eruptions. The skin of the root is good for troubles of the spleen if it be taken in wine in doses of two drachmae, but the patient must give up the use of the bath; it is said that in thirty-five days by urine and by stools the whole spleen is

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- bibitur in lumborum doloribus ac paralyisi. dentium dolores sedat tritum ex aceto semen vel decoctum
 167 vel manducata radix. infunditur et aurium dolori decoctum oleo. ulcera quae phagedaenas vocant folia et radix recens cum melle sanant. sic et strumas discutit radix, parotidas vermiculosque cocta in aqua. iocineris doloribus tusa cum farina hordeacia inponitur. vesicae quoque malis medetur. dant et ad taenias in aceto et melle. oris exulcerationes in aceto decocta tollit. stomacho inutilem esse inter auctores convenit.
- 168 LX. Ligusticum—aliqui panaces vocant—stomacho utile est, item convulsionibus, inflationibus. sunt qui et cunilam bubulam appellaverint, ut diximus, falso.
- 169 LXI. Cunilae praeter sativam plura sunt in medicina genera. quae bubula appellatur semen pulei habet utile ad vulnera commanducatum inpositum, ut quinto post die solvatur. et contra serpentes in vino bibitur ac tritum plagae inponitur. vulnera ab his facta perfricant ** item testudines cum serpentibus pugnaturae, quidamque in hoc usu panaceam vocant. sedat et tumores et virilium mala sicca vel foliis tritis, in omni usu mire congruens vino.
- 170 LXII. Est alia cunila, gallinacea appellata nostris, Graecis organum Heracleoticum. prodest oculis trita addito sale. tussim quoque emendat et ioci-

^a XIX. § 165.

brought away. It is given in drink for lumbago and paralysis. Toothache is eased by pounded caper-seed in vinegar, by a decoction of it, or by chewing the root. Boiled in oil it is injected for ear-ache. The sores called phagedaenic are cured by leaves or freshly gathered root applied with honey. In this form the root removes scrofula; boiled in water it removes parotid tumours and worms. For pains in the liver it is pounded and applied with barley meal. It also cures diseases of the bladder. In vinegar and honey it is also given for tapeworm: A decoction in vinegar removes sores in the mouth. Authorities agree that the caper is harmful to the stomach.

LX. Lovage—some call it panaces—is good for *Lovage.* the stomach, likewise for convulsions and flatulence. Some have called it ox cunila, but wrongly, as I have pointed out.^a

LXI. Besides the cultivated cunila there are *Cunila.* several other kinds used in medicine. The one called ox cunila has a seed like that of pennyroyal which is curative if chewed and applied to wounds, provided that the bandage is not taken off till the fifth day after. For the bites of serpents it is taken in wine and applied to the wound after being pounded. The bites made by serpents they rub . . . likewise tortoises that are going to fight with serpents. Certain people call it panacea (all-heal) in this connection. It relieves tumours and troubles of the male organs, applied dry or after pounding the leaves; for every use it combines wonderfully well with wine.

LXII. There is another, called chicken cunila by Romans, Heracleotic marjoram by the Greeks. Pounded and with the addition of salt it is good for the eyes. It relieves a cough also and liver com-

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nerum vitia, laterum dolores cum farina,¹ oleo et aceto sorbitione temperata, praecipue vero serpentium morsus.

- 171 LXIII. Tertium genus est eius quae a Graecis mascula, a nostris cunilago vocatur, odoris foedi, radice lignosae, folio aspero. vires eius vehementissimas in omnibus generibus earum tradunt, manipulo quoque eius abiecto omnes e tota domo blattas convenire ad eam, privatim adversus scorpiones ex posca pollere, foliis tribus² ex oleo peruncto homine fugari serpentes.
- 172 LXIV. E contrario quae mollis vocatur, pilosioribus ramis et aculeatis, trita mellis odorem habet, digitis tactu eius cohaerescens, altera turis, quam libanotida appellavimus. medetur utraque contra serpentes ex vino vel aceto, pulices etiam contritae cum aqua sparsae necant.
- 173 LXV. Sativa quoque suos usus habet; sucus eius cum rosaceo auriculas iuvat, ipsa ad ictus bibitur. fit ex ea³ montana, serpyllo similis, efficax contra serpentes. urinam movet, purgat a partu mulieres. concoctionem mire adjuvat et aviditatem ad cibos utraque vel in cruditate ieiunis in potione aspersa. luxatis quoque utilis, contra vesparum et similes ictus, ex farina hordeacea et posca utilissima. libanotidis alia genera suis locis dicentur.

¹ farina] farre cum aliquot codd. Deilefsen.

² tribus codd.: tritis conicio.

³ frutex et coni. Warmington.

^a With the reading *tritis*, "pounded."

^b See XIX. § 187.

plaints, pains in the side when mixed into a broth with meal, oil and vinegar, but especially the bites of serpents.

LXIII. There is a third kind, which the Greeks call male *cunila*, and the Romans *cunilago*; it has a foul smell, wood-like root and a rough leaf. Of all varieties of *cunila* it is said that this has the strongest qualities, that a handful of it thrown about attracts all the cockroaches in the whole house, that taken in vinegar and water it is a specific against scorpions, and that if a man be rubbed over with three^a leaves in oil serpents are kept away.

LXIV. On the other hand the *cunila* called soft has shaggier and prickly branches, and when pounded the smell of honey, the fingers sticking together at its touch; a second variety smells of frankincense, and we have called it *libanotis*.^b Either kind in wine or vinegar is an antidote against the bites of serpents; furthermore, pounded and scattered about in water both varieties kill fleas.

LXV. Cultivated *cunila* too has its uses. The juice with rose oil is good for the ear-laps, and it is taken by itself in drink for stings. From it grows the mountain variety, which is like wild thyme and efficacious against the bites of serpents. It is diuretic and cleanses after child-birth. Wild or cultivated it is a wonderful stimulus to digestion and to the appetite, or relieves indigestion taken fasting and sprinkled in a drink. Useful too for sprains, taken in barley meal with vinegar and water it is very useful for the stings of wasps and the like. Other kinds of *libanotis* will be dealt with in their proper place.

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- 174 LXVI. Piperitis, quam et siliquastrum appellavimus, contra morbos comitiales bibitur. Castor et aliter demonstrabat.¹ caule rubro et longo, densis geniculis, foliis lauri, semine albo, tenui, gustu piperis, utilem gingivis, dentibus, oris suavitati et ructibus.
- 175 LXVII. Origanum quod in sapore cunilae aemulatur, ut diximus, plura genera in medicina habet. onitin, alii prasion appellant non dissimile hysopo. privatim eius usus contra rosiones stomachi in tepida aqua et contra cruditates, araneos scorpionesque in vino albo, luxata et incussa in aceto et oleo et lana.
- 176 LXVIII. Tragoriganum similis est serpyllo silvestri. urinam ciet, tumores discutit, contra viscum potum viperaeque ictum efficacissimum, stomacho acida ructanti et praecordiis. tussientibus quoque cum melle datur et pleuriticis et peripleumoniacis.
- 177 LXIX. Heraclium quoque tria genera habet: nigrius latioribus foliis, glutinosum, alterum exilioribus, mollius, sampsucho non dissimile, quod aliqui prasion vocare malunt. tertium inter haec medium est, minus quam cetera efficax. optimum autem Creticum, nam et iucunde olet, proximum Zmyrnaeum inodoriis,² Heracleoticum ad potum utilis,

¹ Castore taliter demonstrante *vulg.*

² inodoriis *Urlichs et Detlefsen* : durius *Mayhoff* : doriis *aut* odorius *codd.*

^a XIX. § 187.

^b Antonius Castor, botanist, often mentioned by Pliny.

^c With the other reading (after comma instead of full stop): "Castor giving the following description."

^d See XIX. § 165.

LXVI. Piperitis, which I have also called şili-quastrum,^a is taken in drink for epilepsy. Castor^b gave a further description of it: ^c "a red, long stem, with its knots close together; leaves like those of the bay; a white, small seed, with a taste like pepper; good for the gums, teeth, sweetness of breath and for belching."

LXVII. Origanum, which rivals cunila in its flavour, as I have said,^d has many varieties useful in medicine. One is onitis, called by some prasion,^e and not unlike hyssop. Its special use is to be taken in warm water for gnawings of the stomach and indigestion, and in white wine for the stings of spiders and scorpions, while it is applied on wool with vinegar and oil for sprains and bruises. *wild marjoram.*

LXVIII. Goat origanum is more like wild thyme. Diuretic, it disperses tumours; if taken in drink it is most efficacious for poisoning by mistletoe or by viper bites, for acid belchings from the stomach and for the hypochondria.^f With honey it is also given for coughs, pleurisy and pneumonia.

LXIX. Heraclium too has three varieties. The darker one with the broader leaf is glutinous; the second variety, with a more slender leaf, is more tender and not unlike sampsuchum, which some prefer to call prasion. There is a third kind, intermediate between the other two, but less efficacious than either. The best kind, however, is the Cretan, which also has a pleasant smell, the next best that of Smyrna, having less smell, and the Heracleotic, *Heraclium.*

^a "Leek green."

^f *Praecordia* generally means the hypochondria. Sometimes it means the lower chest under the heart (hence the name) or the region over the diaphragm. See p. 16.

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- 178 quod onitin vocant. communis autem usus serpentes fugare, percussis esui dare decoctum, eo potu urinam ciere, ruptis, convulsis mederi cum panacis radice, hydropicis cum fico aut cum hysopo acetabuli mensuris decoctum ad sextam, item ad scabiem, pruriginem, psoras in descensione balinearum. sucus auribus infunditur cum lacte mulieris. tonsillis
- 179 quoque et uvis medetur, capitis ulceribus. venena opii et gypsi extinguit decoctum, si cum cinere in vino bibatur. alvum mollit acetabuli mensura, suggillatis inlinitur, item dentium dolori, quibus et candorem facit, cum melle et nitro. sanguinem narium sistit. ad parotidas decoquitur cum hordeacia farina, ad arterias asperas cum galla et melle
- 180 teritur, ad lienem folia cum melle et sale. crassiores pituitas et nigras extenuat coctum cum aceto et sale sumptum paulatim. regio morbo tritum cum oleo in nares infunditur. lassi perunguntur ex eo ita ut ne venter attingatur. epinyctidas cum pice sanat, furunculos aperit cum fico tosta, strumas cum oleo et aceto et farina hordeacia, lateris dolores cum fico inlitum, fluctiones sanguinis in genitalibus tusum ex aceto inlitum, reliquias purgationum a partu.
- 181 LXX. Lepidium inter urentia intellegitur. sic et in facie cutem emendat exulcerando, ut tamen cera et rosaceo facile sanetur. sic et lepras et psoras

called onitis, is more useful for drinking. All kinds are used to keep away serpents, are given to eat boiled to those who have been bitten, are diuretic when taken in drink as above, cure with the root of all-heal ruptures and convulsions, dropsy with fig or with hyssop boiled down to one sixth in doses of one acetabulum, likewise itch, prurigo and psoriasis, if given on going down to the bath. Its juice, with woman's milk, is poured into the ears. It cures the tonsils also and uvula, as well as sores on the head. Boiled, and taken in wine with ashes it neutralizes the poison of opium and gypsum. A dose of one acetabulum loosens the bowels; it is applied to bruises, and also for tooth-ache, imparting whiteness to the teeth when used as a dentifrice with honey and soda. It checks bleeding at the nose. For parotid tumours it is boiled down with barley meal, for a rough trachea pounded with gall-nut and honey, and its leaves with honey and salt are good for the spleen. Boiled with vinegar and salt, and taken in small doses it loosens thick, black phlegm. Beaten up with oil it is poured into the nostrils for jaundice. Tired bodies are rubbed with it, care being taken not to touch the abdomen. With pitch it cures epinyctis; with a roasted fig it brings boils to a head. It is good for scrofulous swellings if applied with oil, vinegar and barley meal, if with fig, for pains in the side, pounded and applied in vinegar for fluxes of blood from the genitals, and also for bringing away more thoroughly the after-birth.

LXX. Dittander (pepperwort) is considered to be *Dittander*. one of the caustic plants. So it clears the complexion, but produces sores on the skin, which, however, are easily cured with wax and rose oil. Thus used,

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tollit semper facile et cicatricum ulcera. tradunt in dolore dentium adalligatum brachio qua doleat convertere dolorem.

- 182 LXXI. Git ex Graecis alii melanthium, alii mela-spermon vocant. optimum quam excitatissimi odoris et quam nigerrimum. medetur serpentium plagis et scorpionum. inlini ex aceto ac melle reperio incensoque serpentes fugari. bibitur drachma una
- 183 et contra araneos. destillationem narium discutit tusum in linteolo olefactum, capitis dolores inlitum ex aceto, et infusum naribus cum irino oculorum epiphoras et tumores, dentium dolores coctum cum aceto, ulcera oris tritum aut commanducatum, item lepras et lentigines ex aceto, difficultates spirandi addito nitro potum, duritias tumoresque veteres et suppurationes inlitum. lacte mulierum auget ali-
- 184 quot¹ continuis diebus sumptum. colligitur sucus eius ut hyoscyami, similiterque largior venenum est, quod miremur, cum semen gratissime panes etiam condiat. oculos quoque purgat, urinam et menses ciet. quin immo linteolo deligatis tantum granis xxx secundas trahi reperio. aiunt et clavis in pedibus mederi tritum in urina, culices suffitu necare, item muscas.
- 185 LXXII. Et anesum adversus scorpiones ex vino bibitur,² Pythagorae inter pauca laudatum sive

¹ aliquot *add. Mayhoff.*

² bibitur *ego* : habetur *codd. et edd.*

^a *I.e.* "black-flower."

^b *I.e.* "black-seed."

it always removes leprous sores and psoriasis easily, as well as the sores left by scars. It is said that in cases of tooth-ache, if it be attached to the arm on the side where the pain is, this is diverted to it.

LXXI. Git is by some Greeks called melanthium,^a *Git or Roman coriander.* by others, melaspermon.^b The best has the most pungent smell and the darkest colour. It cures the wounds of serpents and of scorpions. I find that it is applied in vinegar and honey, and that by burning it serpents are kept away. A dose of one drachma also is taken in drink for the wounds of spiders. Pounded, and smelt in a piece of linen it stops running from the nose, and headaches if applied in vinegar; poured into the nostrils with iris juice it cures fluxes and swellings of the eyes, tooth-ache when boiled with vinegar, ulcers in the mouth when pounded or chewed; likewise leprous sores and freckles when added to vinegar, difficulty of breathing when taken in drink with soda, and indurations, chronic swellings and suppurations, when used as liniment. It increases the flow of women's milk if taken daily for a few days. Its juice is collected in a similar way to that of henbane, and like it is poisonous if taken in too large doses, a fact more remarkable because the seed actually makes a most pleasant seasoning for loaves of bread. It cleanses the eyes also, is diuretic and an emmenagogue. Moreover, I find that merely by tying thirty grains to the body in a piece of linen, the after-birth is brought away. It is also said that pounded and applied in urine it cures corns on the feet, and that fumigation with it kills gnats as well as flies.

LXXII. Anise too is taken in wine for the stings of scorpions, being one of the few remedies specially praised, whether raw or boiled, by Pythagoras.

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- crudum sive decoctum; item viride aridumve omnibus quae condiuntur quaeque intinguntur desideratum, panis etiam crustis inferioribus subditum. saccis quoque additum cum amaris nucibus
- 186 vina commendat. quin ipsum oris halitum iucundiores facit faectoremque tollit manducatum matutinis cum zmyrnio et melle exiguo, mox vino colutum. vultum iuniorem praestat. insomnia levat suspensum in pulvino, ut dormientes olefaciant. adpetentiam ciborum praestat, quando id quoque inter artificia deliciae fecere, ex quo labor desiit cibos poscere. ob has causas quidam anicetum id vocavere.
- 187 LXXIII. Laudatissimum est Creticum, proximum Aegyptium. hoc ligustici vicem praestat in condimentis. dolores capitis levat suffitum naribus. epiphoris oculorum Evenor radicem eius tusam inponit, Iollas ipsum cum croco pari modo et vino, et per se cum polenta ad magnas fluctiones extrahendisque si qua in oculos inciderint. narium quoque
- 188 carcinodes consumit inlitum ex aqua. sedat anginas cum hysopo ac melle ex aceto gargarizatum, auribus infunditur cum rosaceo, thoracis pituitas purgat tostum, cum melle sumptum. melius cum acetabulo anesi nuces amaras L purgatas terere in melle ad tussim. facillime vero anesi drachmae tres, papaveris duae miscentur melle ad fabae magnitudinem
- 189 et ternae diebus sumuntur. praecipuum autem est

* Perhaps in baking, or when it is kneaded. Query: was it painted over the bottom of a loaf in the form of a paste? Cf. § 163.

^b This could mean: "prevents nightmares."

^c Meaning doubtful. Perhaps ἀνίκητον ("invincible").

Green also or dried, it is valued for all such foods as require seasoning or sauce; it is also put under the bottom crust of a loaf.^a Placed with bitter almonds on the strainers it improves wine. Moreover, the breath is made more pleasant and bad odour removed if anise be chewed in the early morning along with alexanders and a little honey, the mouth being afterwards rinsed with wine. It makes the face look younger. It relieves sleeplessness,^b if hung on the pillow, so that it may be smelt by the sleepers. It sharpens the appetite, to do which has been added to the arts by luxury, ever since the craving for food ceased to come from toil. For these reasons some have called anise *anicetum*.^c

LXXIII. The most esteemed variety is the Cretan; next comes the Egyptian. This in seasoning takes the place of lovage. To burn it and inhale the fumes through the nostrils relieves headache. Evenor recommends its pounded root to be applied to fluxes of the eyes; Iollas recommends a similar application of the plant itself with saffron and wine; by itself, with only pearl barley added, he prescribes it for violent fluxes and for extraction of anything which has got into the eyes. Applied in water it also removes a cancerous growth in the nostril. Used as a gargle with hyssop and honey in vinegar it relieves quinsies; it is poured with rose oil into the ears; phlegm in the chest is cleared away by parched anise taken with honey. For a cough it is better to pound up in honey fifty bitter almonds, peeled, with an acetabulum of anise. A remedy very easy indeed to make consists of three drachmae of anise and two of poppy mixed with honey and divided into pieces of the size of a bean, the dose being three daily. Its

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ad ructus; ideo stomachi inflationibus et intestino-
 rum torminibus et coeliacis medetur. singultus et
 olfactum potumque decoctum inhibet. foliis de-
 coctis digerit cruditates. sucus decocti cum apio
 olfactus sternumenta inhibet. potum somnos con-
 citat, calculos pellit, vomitiones cohibet et praecor-
 diorum tumores, et pectorum vitiis, nervis quoque
 190 quibus succinctum est corpus utilissimum. prodest
 et capitis doloribus instillari sucum cum oleo decocti.
 non aliud utilius ventri et intestinis putant, ideo
 dysintericis et in tenesmos datur tostum. aliqui
 addunt et opium, pilulis in die ternis lupini magnitu-
 191 dine in vini cyatho dilutis. Dieuches et ad lumborum
 dolores suco usus est, semen hydropicis et coeliacis
 dedit tritum cum menta, Evenor radicem et ad renes.
 Dalion herbarius parturientibus ex eo cataplasma
 inposuit cum apio, item vulvarum dolori, deditque
 bibendum cum aneto parturientibus. phreneticis
 quoque inlinunt vel recens cum polenta; sic et
 infantibus comitiale vitium, aut contractiones sen-
 192 tientibus. Pythagoras quidem negat corripì vitio
 comitali in manu habentes, ideo quam plurimum
 domi serendum; parere quoque facilius olfactantes,
 et statim a partu dandum potui polenta aspersa.
 Sosimenes contra omnes duritias ex aceto usus est

^a Perhaps parsley.

^b Or "of persons whose body is girt up for work"; "active persons."

^c See pp. 8 and xiii-xiv.

chief value, however, is to cause belching, and so it cures flatulence of the stomach, griping of the intestines and coeliac trouble. Boiled, and either smelt or drunk, it also stays hiccough. Its boiled leaves are a remedy for indigestion. To smell the juice of the plant boiled with celery^a stops sneezing. Taken in drink it promotes sleep, disperses stone, stays vomiting and swelling of the hypochondria, besides being very useful for chest troubles and for the sinews with which the body is girt.^b It is good for headache also to pour in drops upon the head the juice of anise boiled with oil. Nothing is considered to be more beneficial to the belly and intestines, and so it is given roasted for dysentery and for tenesmus. Some add opium also, pills of the size of a lupine-seed being swallowed three times a day and washed down in a cyathus of wine. Dieuches used the juice also for lumbago; the pounded seed with mint he gave for dropsy and coeliac trouble; Evenor gave the root also for diseases of the kidneys. Dalion the herbalist prescribed a poultice of anise and parsley for women in labour, and also for pain in the womb; he recommended it to be taken with dill in drink by women in labour. It is applied also in cases of phrenitis,^c sometimes freshly gathered and with pearl barley; it is also so applied to babies suffering from epilepsy or convulsions. Pythagoras indeed declares that no epileptic fit occurs while anise is held in the hand, and for this reason advises that as much as possible be planted near the home. He also says that to smell it makes for easier childbirth, and that immediately after delivery it should be given in a draught with a sprinkling of pearl barley. Sosimenes used it in vinegar for all indura-

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- eo et contra lassitudines in oleo decoquens addito nitro. semine eius poto lassitudinis auxilium via-
- 193 toribus spopondit. Heraclides ad inflationes stomachi semen tribus digitis cum castorei obolis duobus ex mulso dedit, similiter ad ventris aut intestinorum inflationes et orthopnoicis quod ternis digitis prenderit seminis, tantundem hyoseyami cum lacte asinino. multi vomituris acetabula¹ eius et folia lauri decem trita in aqua bibenda inter cenam
- 194 suadent. strangulatus vulvae, si manducetur et linatur calidum vel si bibatur cum castoreo in aceto et melle, sedat. vertigines a partu cum semine cucumeris et lini pari mensura ternum digitorum, vini albi tribus cyathis discutit. Tlepolemus ad quartanas ternis digitis seminis anesi et feniculi
- 195 usus est in aceto et mellis cyatho uno. lenit articulares morbos, cum amaris nucibus inlitum. sunt qui et aspidum venenis adversari naturam eius putent. urinam ciet, sitim cohibet, venerem stimulat, cum vino sudorem leniter praestat, vestes quoque a tineis defendit. efficacius semper recens et quo nigrius, stomacho tamen inutile est praeterquam inflato.
- 196 LXXIV. Anetum quoque ructus movet et tormina sedat, alvum sistit. epiphoris radices inlinuntur ex aqua vel vino. singultus cohibet semen fervens olfactu. sumptum ex aqua sedat cruditates. cinis eius uvam in faucibus levat, oculos et genituram hebetat.

¹ *Num excidit numerus? Fortasse subauditur decem.*

^a See pp. xi-xii.

^b Here a numeral has apparently fallen out.

tions and for fatigue, boiling it in oil after adding soda. He guaranteed travellers less fatigue if they took anise seed in drink. For flatulence of the stomach Heraclides gave in honey-wine a three-finger pinch of the seed with two oboli of beaver oil, and in like manner for flatulence in the belly or intestines and for orthopnoea ^a a three-finger pinch of the seed, the same quantity of henbane, and asses' milk added. Many advise that those intending to take an emetic should during the dinner take in water ^b acetabula of anise and ten pounded bay leaves. It relieves suffocation of the womb, if it be chewed and applied warm, or if it be taken with beaver-oil in oxymel. A dose of a three-finger pinch of cucumber seed and of the same quantity of linseed, in three cyathi of white wine, dispels vertigo after child-birth. For quartan agues Tlepolemus used a three-finger pinch of the seed of anise and fennel, taken in vinegar and one cyathus of honey. Applied with bitter almonds it relieves diseases of the joints. There are some who believe that its nature neutralizes the poison of asps. Diuretic, it quenches thirst, is an aphrodisiac, promotes with wine a gentle perspiration, and also protects clothes from moths. It is more efficacious always when fresh and the darker it is, yet it injures the stomach except when there is flatulence.

LXXIV. Dill too causes belching and relieves *Dill.* griping; it arrests diarrhoea. Its roots in water or wine are applied for fluxes from the eyes. To smell its seed when boiling checks hiccoughs. Taken in water it relieves indigestion. Its ash relieves an inflamed uvula, but weakens the eyes and the powers of generation.

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- 197 LXXV. Sacopenium quod apud nos gignitur in totum transmarino alienatur. illud enim hammoniacy lacrimae simile sagapemon vocatur. prodest laterum et pectoris doloribus, convolsis, tussibus vetustis excreationibusque, praecordiorum tumoribus. sanat et vertigines, tremulos, opisthotonicos, lienes, lumbos, perfrictiones. datur olfactandum ex aceto in strangulatu vulvae. ceteris et potui datur et cum oleo infricatur. prodest et contra mala medicamenta.
- 198 LXXVI. Papaveris sativi tria diximus genera, et sponte nascentis alia promisimus. e sativis albi calix ipse teritur et e vino bibitur somni causa. semen elephantiasi medetur. e nigro papavere sopor gignitur scapo inciso, ut Diagoras suadet, cum turgescit, ut Iollas, cum deflorescit, hora sereni diei tertia, hoc est cum ros in eo exaruerit. incidi iubent sub capite et calice, nec in alio genere ipsum inciditur
- 199 caput. sucus et hic et herbae cuiuscumque lana excipitur aut, si exiguus est, ungue pollicis, ut lactucae, et postero die magis quod inaruit. papaveris vero largus densatur¹ et in pastillos tritus in umbra siccatur, non vi soporifera modo, verum, si copiosior hauriatur, etiam mortifera per somnos.

¹ densatur] densatus *Mayhoff*, qui post inaruit comma ponit et papaveris vero largus uncis includit.

^a See XIX. § 168.

LXXV. The sacopenium which grows in our *Sacopenium*. country is quite unlike that which comes from overseas. The latter, also called sagapemon, resembles ammoniac gum. It is good for pains in the sides and in the chest, for convulsions, for chronic coughs and expectoration, and for swellings of the hypochondria. It cures also vertigo, palsy, opisthotonic tetanus, diseases of the spleen and loins, and violent chills. It is given in vinegar to be smelt in cases of suffocation of the womb. In other cases it is both given in drink and with oil used as an embrocation. It is also useful as an antidote to harmful drugs.

LXXVI. Of the cultivated poppy I have mentioned three kinds ^a and I promised to describe other kinds, those of the wild poppy. Of the cultivated poppy the calyx itself of the white kind is pounded and is taken in wine to induce sleep. The seed cures elephantiasis. From the dark poppy a soporific is obtained by making incisions in the stalk, when the buds are forming (as Diagoras advises), or when the flowers are falling (as Iollas recommends), at the third hour of a clear day, that is to say, when the dew on the plant has dried up. They recommend that the incision be made beneath the head and calyx, and in no other variety either is an incision made into the head itself. Both this juice and that of any other plant is gathered in wool, or if there be but little, by scratching it off, as it is from lettuce, with the thumb nail, doing the same on the following day to any that has since become drier. Poppy juice however being copious thickens, and squeezed into lozenges is dried in the shade; it is not only a soporific, but if too large a dose be swallowed the sleep even ends in death. It

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- opium vocant. sic scimus interemptum P. Licini Caecinae praetorii viri .patrem in Hispania Bavili, cum valetudo inpetibilis odium vitae fecisset, item
 200 plerosque alios. qua de causa magna concertatio extitit. Diagoras et Erasistratus in totum damnavere ut mortiferum, infundi vetantes praeterea, quoniam visui noceret. addidit Andreas ideo non protinus excaecari eo, quoniam adulteraretur Alexandriae. sed postea usus eius non improbatum est medicamento nobili quod *διὰ κωδυνῶν* vocant.
 201 semine quoque eius trito in pastillos e lacte utuntur ad somnum, item ad capitis dolores cum rosaceo, cum hoc et aurium dolori instillatur. podagris inlinitur cum lacte mulierum,—sic et foliis ipsis utuntur—item ad ignes sacros et vulnera ex aceto. ego tamen damnaverim collyriis addi, multoque magis quas vocant *ληξιπυρέτους* quasque *πεπτικὰς* et *κοιλιακάς*.
 202 nigrum tamen coeliacis in vino datur. sativum omne maius. rotunda ei capita, at silvestri longa ac pusilla, sed ad omnes effectus valentiora. decoquitur et bibitur contra vigilias, eademque aqua fovet ora. optimum in siccis et ubi raro pluatur. cum capita ipsa et folia decocuntur, sucus meconium vocatur
 203 multum opio ignavior. experimentum opii est primum in odore—sincerum enim perpeti non est—

is called opium. In this way, we are told, died at Babilum in Spain the father of Publius Licinius Caecina, a man of praetorian rank, when an unbearable illness had made life hateful to him, and so also several others. For this reason a great controversy has arisen. Diagoras and Erasistratus have utterly condemned it as a fatal drug, forbidding its use moreover in injections on the ground that it is injurious to the eyesight. Andreas has added that the only reason why it does not cause instantaneous blindness is because it is adulterated at Alexandria. Afterwards, however, its use was not disapproved of in the form of the famous drug called *διὰ κωδύων* (diacodion). The seed too pounded into lozenges with milk is used to induce sleep, also with rose oil for headache; with rose oil too it is poured into the ears for ear-ache. As a liniment for gout it is applied with woman's milk (the leaves by themselves are also so used), likewise in vinegar for erysipelas and wounds. I myself, however, should disapprove of its addition to eye salves, and much more to what are called febrifuges, digestives and coeliacs; the dark poppy, however, is given in wine for coeliac trouble. All kinds of cultivated poppy are larger than the wild. The heads are round, while those of the wild are long and small, though for all purposes more effective. The poppy is boiled and the liquid drunk for sleeplessness; with the same water the face is fomented. The best poppies grow on dry soils, and where the rainfall is slight. When the heads themselves and the leaves are boiled down, the juice is called meconium, and is much weaker than opium. The chief test of opium is its smell, that of pure opium being unbearable; the

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mox in lucernis, ut pura luceat flamma et ut extincto demum oleat, quae in fucato non eveniunt. accenditur quoque difficiliter et crebro extinguitur. est sinceri experimentum et in aqua, quoniam ut nebula innatat, fictum in pusulas coit. sed maxime mirum est aestivo sole deprehendi. sincerum enim sudat et se diluit donec suco recenti simile fiat. Mnesides optime servari putat hyoscyami semine adiecto, alii in faba.

- 204 LXXVII. Inter sativa et silvestria medium genus, quoniam in arvis sed sponte nasceretur, rhoeam vocavimus et erraticum. quidam id decerptum protinus cum toto calice mandunt. alvum exinanit. capita quinque decocta in vini tribus heminis pota et somnum faciunt.
- 205 LXXVIII. Silvestrium unum genus ceratitim vocant, nigrum, cubitali altitudine, radice crassa et corticosa, calyculo inflexo ut corniculo. folia minora et tenuiora quam ceteris silvestribus. semen exile tempestivum est messibus, alvum purgat dimidio
- 206 acetabulo in mulso. folia trita cum oleo argema iumentorum sanant. radix acetabuli mensura cocta in duobus sextariis ad dimidias datur ad lumborum vitia et iocineris. carbunculis medentur ex melle folia. quidam hoc genus glaucion vocant, alii parali-um. nascitur enim in adflatu maris aut nitroso loco.

^a Book XIX. § 169. It is clear from the description given that this is our field poppy, so common in cornfields in summer.

^b Possibly "petals."

^c Sea-blue plant.

^d Sea-shore plant.

next best test is to put it in a lamp, when it should burn with a bright, clear flame, and smell only when it has gone out; adulterated opium does not behave in this fashion. Adulterated opium is also harder to light, and is continually going out. A further test of pure opium is by water, on which it floats as a light cloud, while the impure gathers into blisters. But especially wonderful is the fact that pure opium is detected by the summer sun. For pure opium sweats and melts until it becomes like freshly gathered juice. Mnesides thinks that opium is best kept by adding the seed of henbane, others by putting it in beans.

LXXVII. Intermediate between the cultivated poppy and the wild is a third kind, for though growing on cultivated land it is self-sown; we have called it *rheas* or *roving poppy*.^a Some gather it and eat it straight away with the whole calyx. It acts as a purge; five heads boiled in three heminae of wine also induce sleep.

LXXVIII. Of the wild poppy one kind is called *ceratitis*. Black-seeded, a cubit high, with a thick root covered with a hard skin, it has a little calyx curved like a little horn. Its leaves ^b are smaller and thinner than those of the other wild varieties. The seed is small, ripening at harvest; half an acetabulum of it, taken in honey wine, acts as a purge. The pounded leaves with oil cure eye-ulcers of beasts of burden. Its root, in the proportion of one acetabulum to two sextarii of water, boiled down to one half, is given for complaints of the loins and liver. Its leaves applied in honey are a cure for carbuncles. This variety is called *glaucion* ^c by some and *paralium* ^d by others, for it grows within reach of the sea breezes or in alkaline soils.

*Horned
poppy.*

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- 207 LXXIX. Alterum e silvestribus genus heracium vocatur, ab aliis aphron,¹ foliis, si procul intuearis, speciem passerum praebentibus, radice in summa terrae cute, semine spumeo. ex hoc lina splendorem trahunt. aestate tunditur in pila² comitialibus morbis acetabuli mensura in vino albo; vomitionem enim facit, medicamento quod διὰ κωδυνῶν et arteriace
- 208 vocatur utilissimum. fit autem huius papaveris aut cuiuscumque silvestris capitibus cxx in aquae caelestis sextariis tribus biduo maceratis in eademque discoctis, deinde siccato³ iterumque cum melle decocto ad dimidias partes vapore tenui. addidere postea drachmas senas croci, hypocisthidis, turis, acaciae et passi Cretici sextarium, haec ostentatione; simplex quidem et antiqua illa salubritas papavere et melle constat.
- 209 LXXX. Tertium genus est tithymalon—mecona vocant, alii paralion—folio lini, flore albo, capite magnitudinis fabae. colligitur uva florente, siccatur in umbra. semen potum purgat alvum dimidio acetabulo in mulso. cuiuscumque autem papaveris caput viride vel siccum inlitum epiphoras oculorum lenit. opium ex vino meraculo si protinus detur,

¹ aphron aut aphro codd. : aphrodes Hard. et Mayhoff.

² pila] Hic punctum ponit Mayhoff, qui etiam acetabulo seminis coni., et item ante medicamento add.

³ Ante siccato add. suco Mayhoff.

^a Pliny has apparently confused this plant with the struthion of XIX. ch. 18.

^b The text certainly appears dislocated at this point. Mayhoff makes it a little less disjointed by putting vomitionem enim facit in a parenthesis; but his acetabulo is odd.

LXXIX. A second variety of wild poppy is called heracleum, by others aphron, having leaves, if you look at it from a distance, that look like sparrows.^a Its roots are on the surface of the ground, and its seed is like foam. It is from the use of this plant that linen gets its shiny whiteness. In summer it is pounded in a mortar for epilepsy, the dose being an acetabulum in white wine;^b for it causes vomiting, and is very useful for the drug called diacodion and arteriace. This preparation however is made by steeping one hundred and twenty heads of this or any other wild poppy in three sextarii of rain water for two days; then they are thoroughly boiled in the same water, and after the whole^c has been dried it is again boiled down to one half with honey in a slow heat. More recently there has been added six drachmae of saffron, hypocisthis, frankincense and gum arabic, with a sextarius of Cretan raisin-wine. This however is just for show; this simple and old-fashioned remedy depends for its virtues entirely on the poppy and honey.

LXXX. A third variety is tithymalon, called by some mecon, by others paralion, with a leaf like that of flax, a white flower, and a head of the size of a bean. It is gathered when the grape is at its best^d and then dried in the shade. Its seed, taken in half an acetabulum of honey wine, purges the bowels. But the head of any poppy, whether fresh or dried, if applied to the eyes relieves fluxes. Opium taken in nearly neat wine, if administered immediately, is

^c Mayhoff's addition of *suco* is attractive.

^d Or: "when the grape-bunch is in flower." Pliny XI. § 34 says that *uva floret* at the solstice.

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- scorpionum ictibus resistit. aliqui hoc tantum nigro tribuunt, si capita eius vel folia terantur.
- 210 LXXXI. Est et porcillaca quam peplin vocant, non multum sativa efficacior cuius memorabiles usus traduntur: sagittarum venena et serpentium haemorrhoidum et presterum restingui pro cibo sumpta et plagis inposita extrahi, item hyoscyami pota e passo expresso suco. cum ipsa non est, semen eius simili effectu prodest. resistit et aquarum vitiis, capitis dolori ulceribusque in vino tusa et inposita, reliqua
- 211 ulcera commanducata cum melle sanat. sic et infantium cerebro inponitur umbilicoque prociduo, in epiphoris vero omnium fronti temporibusque cum polenta, sed ipsis oculis e lacte et melle, eadem, si procidant oculi, foliis tritis cum corticibus fabae, pusulis cum polenta et sale et aceto. ulcera oris tumoremque gingivarum commanducata cruda sedat, item dentium dolores, tonsillarum ulcera sucus
- 212 decoctae. quidam adiecere paulum murrae. nam mobiles dentes stabilit commanducata,¹ vocemque firmat et sitim arcet. cervicis dolores cum galla et lini semine et melle pari mensura sedat, mammarum vitia cum melle aut Cimolia creta, salutaris et suspiriosis semine cum melle hausto. stomachum in
- 213 acetariis sumpta corroborat. ardenti febribus in-

¹ *Post commanducata iterant codd. cruda sedat. In uncis Io. Müller et Mayhoff.*

^a Symptom of an obscure disease, now perhaps unknown.

^b This use of *nam*, characteristic of Pliny, in a slightly adversative sense (*autem* or Greek *δέ*) has occurred before in this book. See §§ 28, 55.

^c Cimolus was an island (now Cimoli) of the Cyclades where was found a chalk much used in medicine.

an antidote for the stings of scorpions. Some give this property only to the dark variety, if its heads or leaves be pounded up.

LXXXI. There is also purslane, which is called *Purslane*. peplis, being not much more beneficial than the cultivated variety, of which are recorded remarkable benefits: that the poison of arrows and of the serpents haemorrhoids and prester are counteracted if purslane be taken as food, and if it be applied to the wound, the poison is drawn out; likewise the poison of henbane if purslane be taken in raisin wine, after extraction of the juice. When the plant itself is not available, its seed has a similarly beneficial effect. It also counteracts the impurities of water, and if pounded and applied in wine it cures headache and sores on the head; other sores it heals if chewed and applied with honey. So prepared it is applied also to the cranium of infants, and to an umbilical hernia; for eye-fluxes in persons of all ages, with pearl barley, to the forehead and temples, but to the eyes themselves in milk and honey; also, if the eyes should fall forwards,^a pounded leaves are applied with bean husks, to blisters with pearl barley, salt and vinegar. Sores in the mouth and gumboils are relieved by chewing it raw; tooth-ache likewise and sore tonsils by the juice of the boiled plant, to which some have added a little myrrh. But^b to chew it makes firm loose teeth, strengthens the voice and keeps away thirst. Pains at the back of the neck are relieved by it with equal parts of gall nut, linseed and honey, complaints of the breasts with honey or Cimolian^c chalk, while asthma is alleviated by a draught of the seed with honey. Taken in salad it strengthens the stomach. It is applied with

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- ponitur cum polenta, et alias manducata refrigerat etiam intestina. vomitiones sistit. dysinteriae et vomicis estur ex aceto vel bibitur cum cumino, tenesmis autem cocta. comitialibus cibo vel potu prodest, purgationibus mulierum acetabuli mensura in sapa, podagris calidis cum sale inlita et sacro igni. sucus eius potus renes iuvat ac vesicas, ventris
- 214 animalia pellit. ad vulnorum dolores ex oleo cum polenta inponitur. nervorum duritias emollit. Metrodorus, qui ἐπιτομὴν ῥιζοτομουμένων scripsit, purgationibus a partu dandam censuit. venerem
- 215 inhibet venerisque somnia. praetorii viri pater est, Hispaniae princeps, quem scio propter inpetibiles uvae morbos radicem eius filo suspensam e collo gerere praeterquam in balineis, ita liberatum incommodo omni. quin etiam inveni apud auctores caput inlitum ea destillationem anno toto non sentire. oculos tamen hebetare putatur.
- 216 LXXXII. Coriandrum inter silvestria non invenitur. praecipuum esse constat Aegyptium. valet contra serpentium genus unum quod amphisbaenas vocant potum inpositumque. sanat et alia vulnera, epinyctidas, pusulas tritum; sic et omnes tumores collectionesque cum melle aut uva passa, panos vero ex aceto tritum. seminis grana tria in tertianis

^a A superficial abscess to a hair follicle. See Celsus V. 28, § 10, *fit maxime aut in vertice aut in aliis aut in inguinibus*. See § 4 and Introduction, p. x.

pearl barley to reduce high temperature, and besides this when chewed it also cools the intestines. It arrests vomiting. For dysentery and abscesses it is eaten in vinegar or taken in drink with cummin, and for tenesmus it is boiled. Whether eaten or drunk it is good for epilepsy, for menstruation if one acetabulum be taken in concentrated must, for hot gout and erysipelas if applied with salt. A draught of its juice helps the kidneys and the bladder, expelling also intestinal parasites. For the pain of wounds it is applied in oil with pearl barley. It softens indurations of the sinews. Metrodorus, author of *Compendium of Prescriptions from Roots*, was of opinion that it should be given after delivery to aid the after-birth. It checks lust and amorous dreams. A Spanish prince, father of a man of praetorian rank, because of unbearable disease of the uvula, to my knowledge carries except in the bath a root of purslane hung round his neck by a thread, being in this way relieved of all inconvenience. Moreover, I have found in my authorities that the head rubbed with purslane ointment is free from catarrh the whole year. It is supposed however to weaken the eyesight.

LXXXII. Coriander is not found among wild *Coriander.* plants. The best, as is generally agreed, is the Egyptian. It is an antidote for the poison of one kind of serpent, the amphisbaena, both taken in drink and applied. It heals other wounds also, when pounded, besides night rashes and blisters; in this form too, with honey or raisins, all tumours and gatherings, though to treat the panus^a the pounded plant must be applied in vinegar. Some prescribe three grains of seed to be swallowed before the fit comes on by patients with tertian ague, or

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- devorari iubent aliqui ante accessionem, vel plura
 217 inlini fronti. sunt qui et ante solis ortum cervicalibus
 subici efficaciter putent. vis magna ad refrigerandos
 ardores viridi. ulcera quoque quae serpunt sanat
 cum melle vel uva passa, item testes, ambusta,
 carbunculos, aures, cum lacte mulieris epiphoras
 oculorum, ventris et intestinorum fluctiones semen
 ex aqua potum. bibitur et in choleris cum ruta.
 218 pellit animalia interaneorum, cum mali punici suco
 et oleo semen potum. Xenocrates tradit rem miram,
 si vera est, menstrua contineri uno die, si unum
 granum biberint feminae, biduo, si duo, et totidem
 diebus quot grana sumpserint. M. Varro coriandro
 subtrito et cumino acetoque carnem omnem in-
 corruptam aestate servari putat.
 219 LXXXIII. Atriplex et silvestre est, accusatum
 Pythagorae tamquam faceret hydropicos morbosque
 regios et pallorem, concoqueretur difficillime, ac ne
 in hortis quidem iuxta id nasci quicquam nisi lan-
 guidum culpavit. addidere Dionysius et Diocles
 plurimos gigni ex eo morbos, nec nisi mutata saepe
 aqua coquendum, stomacho contrarium esse, len-
 220 tiginis et papulas gignere. miror quare difficulter in
 Italia nasci tradiderit id Solon Smyrnaeus. Hippo-
 crates vulvarum vitiis infundit id cum beta. Lycus
 Neapolitanus contra cantharidas bibendum dedit,

^a *Et sativum* found in several MSS. appears to be under-
 stood, or rather implied, by *et*.

more than three to be applied in ointment to the forehead. There are some who believe that it is beneficial to place coriander before sunrise under the pillows. The fresh plant has great power to cool inflammations. Spreading sores also are healed by coriander with honey or raisins, likewise diseased testes, burns, carbuncles and sore ears, fluxes of the eyes too if woman's milk be added, while fluxes from belly or intestines are stayed by the seed taken in water. It is also taken in drink with rue for cholera. Intestinal parasites are expelled by coriander seed, taken with pomegranate juice and oil. Xenocrates records a great wonder, if it be a fact: that if women take in drink one grain of the seed the menses are retarded for one day, for two days if she takes two grains, and so on, one day's delay for each grain taken. M. Varro thinks that by slightly pounded coriander and cummin, with vinegar, meat of any kind can be kept sweet in the heat of summer.

LXXXIII. Orache is also found wild,^a a vegetable *Orache*. accused by Pythagoras of causing dropsy, jaundice and pallor, and of being very hard indeed to digest; he adds as another drawback that not even in gardens does anything grow near it without drooping. Dionysius and Diocles have added that very many diseases arise from it, that it must never be boiled without changing the water often, that it is injurious to the stomach, and that it is the cause of freckles and pimples. I am at a loss to understand why Solon of Smyrna has stated that orache is difficult to grow in Italy. Hippocrates injects it with beet for complaints of the womb. Lycus of Naples prescribed it to be taken in drink for stings of the

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- 224 ut quidam dicunt, si vomatur. De iisdem mira et alia traduntur, sed maxime, si quis cotidie suci ex qualibet earum sorbeat cyathum dimidium, omnibus morbis cariturum. ulcera manantia in capite sanant in urina putrefactae, lichenas et ulcera oris cum melle, radix decocta furfures capitis et dentium mobilitatem. eius quae unum caulem habet radice circa dentem qui doleat pungunt, donec desinat
- 225 dolor. eadem strumas et parotidas, panos addita hominis saliva purgat citra vulnus. semen in vino nigro potum pituita et nauseis liberat. radix mammarum vitiis occurrit adalligata in lana nigra, tussim in lacte cocta et sorbitionis modo sumpta quin
- 226 diebus emendat. stomacho inutiles Sextius Niger dicit, Olympias Thebana abortivas esse cum adipe anseris, aliqui purgari feminas foliis earum manus plenae mensura in oleo et vino sumptis. utique constat parturientes foliis substratis celerius solvi. protinus a partu revocandum,¹ ne vulva sequatur.
- 227 dant et sucum bibendum parturientibus ieiunis in vino decocta² hemina. quin et semen adalligant bracchio genitale non continentium. adeoque veneri³ nascuntur, ut semen unicaulis adpersum curationi⁴ feminarum aviditates augere ad infinitum Xeno-

¹ revocandum *Detlefsen* : revocanda *Mayhoff* (*vetus ed.*) : revocandam *aliquot codd.*

² decocta *vulg.* : decoctae *Detlefsen et Mayhoff.*

³ veneri *Detlefsen et Mayhoff* : venere *codd.* : ego venere< m excitantes> *malim.*

⁴ curationi *Detlefsen et Mayhoff* : curationis *codd.* *Aliae coni. sunt* cubili, genitali, cubationi. "*Locus : nondum restitutus videtur,*" dicit *Mayhoff.*

be brought back by vomiting. Other marvels are reported of the mallows, the most wonderful being that whoever swallows daily half a cyathus of the juice of any one of them will be immune to all diseases. Running sores on the head are cured by mallows that have rotted in urine, lichen and sores in the mouth by them and honey, dandruff and loose teeth by a decoction of the root. With the root of the single-stem plant they stab around an aching tooth until the pain ceases; the same plant^a clears scrofula and parotid abscesses, and with the addition of human saliva superficial abscess^b also, and that without leaving a wound. The seed taken in dark wine clears away phlegm and nausea. The root attached as an amulet in dark wool stays troubles of the breasts; boiled in milk and taken like broth it relieves a cough in five days. Sextius Niger says that mallows are injurious to the stomach; the Theban lady Olympias that with goose-grease they cause abortion, and others that a handful of their leaves taken in oil and wine assist the menstruation of women. It is agreed at any rate that women in labour are more quickly delivered if mallow leaves are spread under them, but they must be withdrawn immediately after delivery for fear of prolapsus of the womb. They give the juice to be drunk by women in labour; they must be fasting, and the dose is a hemina boiled down in wine. Moreover, they attach the seed to the arm of sufferers from spermatorrhoea, and mallows are so aphrodisiac that Xenocrates maintains that the seeds of the single-stem mallow, sprinkled for the treatment of women, stimulate

^a Possibly "root," *eadem* referring to *radice*.

^b See § 216.

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crates tradat, itemque tres radices iuxta adalligatas. tenesmo, dysintericis utilissime infundi, item sedis vitiis, vel si foveantur. melancholicis quoque sucus datur cyathis ternis tepidus, et insanientibus quater
 228 ternis, decoctae comitialibus heminae suci. hic et calculosis et inflatione et torminibus aut opisthotonico laborantibus tepidus inlinitur. et sacris ignibus et ambustis decocta in oleum¹ folia inponuntur, et ad vulnerum impetus cruda cum pane. sucus decoctae nervis prodest et vesicae et intestinorum rosionibus. vulvas et cibo et infusione emollit oleum, sucus
 229 decoctae permeatus suaves facit. althaeae in omnibus supra dictis efficacior radix, praecipue convulsis ruptisque. cocta in aqua alvum sistit, ex vino albo

¹ in oleum. *Ab his verbis usque ad facit Dellefsen sequor, qui codd. sequi videtur. Sensus difficillimus est. Mayhoff in oleo coni. et alvo pro oleum; comma post rosionibus et punctum post emollit ponit, sed comma ante sucus delet.*

"The reading and sense are more than doubtful. Besides the oddness of *veneri nascuntur* and *adpersum curationi*, one might well ask: does *feminarum* depend on *curationi* or on *aviditates*, and if the latter, is it objective or subjective? *Genitali* for *curationi* would be a great improvement to the sense, but, if it be correct, how did *curationis* arise?

Perhaps the MSS. *venere* should be emended to <in> *venere*m, or *venerem* <excitantes>, and *curatio* may represent *θεραπεία* in its sense of "courting." Cf. Xenophon *Cyrop.* I. 5, 18, *θεραπεύειν γυναικα*.

This difficult passage becomes a little more intelligible if we suppose that Pliny, or Pliny's authority, used slightly veiled expressions on this occasion. Perhaps such delicacy was shown by Xenocrates that Pliny found difficulty in translating him. If this be so, it would account for the vagueness of *curationi feminarum aviditates augere ad infinitum*, strange enough in any case. The same delicacy may perhaps be seen in *permeatus suaves facit* (§ 228), which may refer to the passing of urine and faeces.

their sexual desire to an infinite degree,^a and that three roots attached near to the part have a like effect. He says too that injections of mallow are very good for tenesmus and dysentery, and also for rectal troubles, or fomentations may be used. The juice is also given warm in doses of three cyathi to sufferers from melancholia,^b and in doses of four to those who are raving;^c for epilepsy the dose is a hemina of the decocted juice. This juice is also applied warm to patients with stone, and to sufferers from flatulence, griping and opisthotonus.^d For both erysipelas and burns the leaves are applied boiled down to an oily paste,^e and they are applied raw with bread for painful^f wounds. The juice of a decoction is good for sinews, bladder and gnawings of the intestines. The paste soothes the womb whether taken by the mouth or injected; the decoction makes the passage pleasant. For all purposes mentioned above the root of althaea is more efficacious, especially for spasms and ruptures. Boiled in water it checks looseness of the bowels; taken in white wine it is good for scrofula, parotid

^b Any kind of depression, slight or severe, caused or supposed to be caused by "black bile." See p. xiv.

^c Delirium or insanity is meant.

^d See note on § 31.

^e With the readings of Mayhoff: "in oil"; "and soothes etc." *Permeatus* may be translated "peristaltic action," or "the passing of excreta."

There remains the difficulty that *decocta in oleum* is odd, yet supported by all MSS. and implied in *emollit oleum* later on. Mayhoff has *oleo* and *emollit. alvo*, but the MSS. give us the more difficult reading, and an effort should be made to understand it. May *oleum* be the sticky paste obtained by boiling the leaves with a little liquid?

^f See § 259.

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- strumas et parotidas, et mammarum inflammationes; et panos in vino folia decocta et inlita tollunt. eadem arida in lacte decocta quamlibet perniciosae tussi
 230 citissime medentur. Hippocrates vulneratis siti-
 tibusque defectu sanguinis radice decoctae sucum
 bibendum dedit, et ipsam vulneribus cum melle et
 resina, item contusis, luxatis, tumentibus; et
 musculis, nervis, articulis inposuit ut supra; spasticis,
 dysintericis in vino bibendam dedit. mirum aquam
 radice ea addita addensari sub diu atque glaci-
 escere. efficacior autem quo recentior.
- 231 LXXXV. Nec lapathum dissimiles effectus habet.
 est autem et silvestre, quod alii oxalida appellant,
 nostri vero rumicem, alii lapathum canterinum,¹
 sapore sativo proximum, foliis acutis, colore betae
 candidae, radice minima, ad strumas cum axungia
 efficacissimum. est et alterum genus—fere oxyla-
 pathum vocant—sativo similis et acutiore folio ac
 rubriore, non nisi in palustribus nascens. sunt qui
 et hydrolapathum tradant in aqua natum et aliud
 hippolapathum maius sativo candidiusque ac spissius.
- 232 silvestria scorpionum ictibus medentur et feriri
 prohibent habentes. radix aceto decocta, si coluatur
 sucus, dentibus auxiliatur, si vero bibatur, morbo
 regio. semen stomachi inextricabilia vitia sanat.
 hippolapathi radix privatim ungues scabros detrahit.

¹ nostri vero . . . canterinum post minima ponunt codd.
Urlichs delere velit; transponit Mayhoff.

^a See § 216.

abscesses and inflammation of the breasts, and an application of the leaves, boiled down in wine, removes superficial abscess.^a The same leaves dried and boiled down in milk cure very quickly the most racking cough. Hippocrates gave the juice of the boiled-down root to be drunk by wounded men who were thirsty through loss of blood, and applied the plant itself with honey and resin to wounds; likewise to bruises, sprains, and swellings; as above also to muscles, sinews and joints. He gave it to be taken in wine by patients suffering from cramp or dysentery. It is remarkable that water to which this root has been added thickens in the open air and congeals. The fresher it is also, the better.

LXXXV. Sorrel (*lapathum*) has similar properties. *Sorrel.* There is also a wild kind called by some oxalis, by our people rumex and by others gelding sorrel. It has a taste very like that of the cultivated kind, pointed leaves, the colour of white beet and a very small root, being when mixed with axle-grease very efficacious for scrofula. There is also another kind, generally called pointed sorrel, even more like the cultivated kind, but with a leaf more pointed and redder, growing only in marshy localities. There are some who speak of a water sorrel, growing in water, and yet another, horse sorrel, larger, paler and more compact than the cultivated kind. The wild sorrels heal the stings of scorpions and protect from stings those who carry them on their persons. The root, boiled down in vinegar, is good for the teeth, if the juice be used as a mouth wash, while to drink the same is good for jaundice. The seed cures inveterate stomach troubles. The root of horse sorrel, in particular, brings away scabrous nails; its

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- 233 dysintericos semen duabus drachmis in vino potum liberat. oxylapathi semen lotum in aqua caelesti sanguinem reicientibus adiecta acacia lentis magnitudine prodest. praestantissimos pastillos faciunt ex foliis et radice addito nitro et ture exiguo. in usu aceto diluunt.
- 234 LXXXVI. Sed sativum in epiphoris oculorum inlinunt frontibus. radice lichenas et lepras curant, in vino vero decocta strumas et parotidas, et calculos pota e¹ vino et lienes inlita, coeliacos aequae et dysintericos et tenesmos. ad eademque² omnia efficacius ius lapathi, et ructus facit et urinam ciet et caliginem oculorum discutit, item pruritum corporis in solia balnearum additum aut prius ipsum inlitum sine
- 235 oleo. firmat et commanducata radix dentes. eadem decocta cum vino sistit alvum, folia solvunt. adiecit Solo, ne quid omittamus, bulapathum, radicis tantum altitudine differens et erga³ dysintericos effectum potae⁴ ex vino.
- 236 LXXXVII. Sinapi, cuius in sativis tria genera diximus, Pythagoras principatum habere ex his quorum sublime⁵ vis feratur iudicavit, quoniam non aliud magis in nares et cerebrum penetret: ad serpentium ictus et scorpionum tritum cum aceto inlinitur. fungorum venena discutit. contra pi-

¹ e add. *Mayhoff*.

² ad eademque *Dellefsen*: ex eademque ad *Mayhoff*.

³ erga *codd.* et *Dellefsen*: egregio ad *Mayhoff*.

⁴ potae *Gronovius*: pota *codd.*

⁵ sublime *Dellefsen et codd.*: in sublime *Mayhoff*.

^a See XIX. § 171.

seed taken in wine in doses of two drachmae cures dysentery. The seed of pointed sorrel, washed in rain-water, with the addition of a piece of gum arabic, of the size of a lentil, is good for spitting of blood. Most excellent lozenges are made from the leaves and root, with the addition of soda and a little frankincense. When wanted for use they are steeped in vinegar.

LXXXVI. But the cultivated kind is applied to the forehead for fluxes from the eyes. With the root they treat lichen and leprous sores; it is boiled down in wine however for scrofula and parotid abscesses, taken in wine for stone, and applied as liniment for complaints of the spleen, being equally good for coeliac troubles, dysentery and tenesmus. For all the same purposes the juice of sorrel is more efficacious; it causes belching, is diuretic, and dispels dimness of the eyes; put in the bottom of the bath, or rubbed on the body without oil before taking a bath, it also removes itching of the body. The root also chewed strengthens loose teeth. A decoction of it with wine checks looseness of the bowels; the leaves relax them. Solon has added (not to omit anything) another variety, ox sorrel, differing from the others only in the depth of the root, and by the efficacy of this root, when taken in wine, to cure dysentery.

LXXXVII. Mustard, of which we have mentioned ^a *Mustard*. three kinds among the cultivated plants, Pythagoras judged to be chief of those whose pungent properties reach a high level, since no other penetrates further into the nostrils and brain. Pounded it is applied with vinegar to the bites of serpents and scorpion stings. It counteracts the poisons of fungi.

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- tuitam tenetur in ore, donec liquescat, aut gar-
 237 garizatur cum aqua mulsa. ad dentium dolores
 manditur, ad uvam gargarizatur cum aceto et melle,
 stomacho utilissimum contra omnia vitia, pulmonibus
 excreationes faciles facit in cibo sumptum, et sus-
 pirirosis datur, item comitialibus taediis¹ cum succo
 cucumerum. sensus atque sternutamentis caput
 purgat, alvum molliat, menstrua et urinam ciet. et
 238 hydropicis inponitur cum fico et cumino tusum ternis
 partibus. comitali morbo aut vulvarum conversione
 suffocatas excitat odore aceto mixto, item lethar-
 gicos; adicitur tordylon—est autem hoc semen ex
 seseli—et si vehementior lethargus premat, cruribus
 aut etiam capiti inlinatur cum fico ex aceto. veteres
 dolores thoracis, lumborum, coxendicum, umerorum
 et in quacumque parte ex alto corporis vitia extra-
 henda sunt² inlitum caustica vi emendat pusulas
 faciendo, at in magna duritia sine fico inpositum aut,
 si vehementior ustio timeatur, per duplices pannos.
 239 utuntur eo ad alopecias cum rubrica, psoras, lepras,
 phthirias, tetanicos, opisthotonicos. inungunt
 quoque scabras genas aut caligantes oculos cum
 melle, succusque tribus modis exprimitur in fictili,
 calescitque in eo sole modice. exit et e cauliculo
 succus lacteus, qui ita³ cum induruit, dentium dolori
 240 medetur. semen ac radix, cum inmaduere musto,

¹ taediis *Gronovius*: ter die *Mayhoff*: tediis *codd.*

² sunt *codd. et Dellefsen*: sint *Mayhoff*.

³ qui ita *Dellefsen*: eius gutta *Mayhoff*: lactucae vice.
 ita *Io. Müller*: eiuce ui ita aut ei uetui ita *codd.*

^a With the reading of *Mayhoff*: "to epileptics three times a day."

^b See pp. xiii, xiv.

^c See note on § 31.

^d Others translate, "styes on the eyelids." See § 3.

^e *Mayhoff*: "a drop of it when hardened."

For phlegm it is kept in the mouth until it melts, or is used as a gargle with hydromel. For tooth-ache it is chewed, for the uvula it is used as a gargle with vinegar and honey. It is very beneficial for all stomach troubles. Taken with food it eases expectoration from the lungs, and is given to asthmatics, as well as for epileptic exhaustion^a with the addition of juice of cucumber. It clears the senses, and, by the sneezing caused by it, the head; it relaxes the bowels; it promotes menstruation and urine. Pounded with figs and cummin, each being one third of the whole, it is applied externally for dropsy. By its powerful smell when mixed with vinegar mustard revives those in epileptic swoons and women fainting with prolapsus, as well as those afflicted with lethargus.^b Tordylon—that is, the seed of hartwort—is added, and if the lethargy be unusually deep, it is applied with fig in vinegar to the legs or even to the head. Long-standing pains of the chest, loins, hips, shoulders, and whatever deep-seated troubles in any part of the body have to be removed, are relieved by the caustic property of an external application, causing blisters; but when there is great hardness the application is made without the fig, or if too severe burning be feared, between a doubled cloth. They use it with red earth for mange, itch, leprous sores, phthiriasis, tetanus and opisthotonus.^c With honey they also use it as ointment for scabrous cheeks^d or dimness of vision, and the juice is extracted in three ways in an earthen pot, in which it is slightly warmed by the sun. There also exudes from the slender stem of the mustard plant a milky juice, which, when it has thus hardened,^e cures tooth-ache. Seed and root, steeped in must, are

PLINY : NATURAL HISTORY

conteruntur manusque plenae mensura sorbentur ad confirmandas fauces, stomachum, oculos, caput sensusque omnes, mulierum etiam lassitudines, saluberrimo¹ genere medicinae. calculos quoque discutit potum in aceto. inlinitur et livoribus sugillatisque cum melle et adipe anserino aut cera Cypria. fit et oleum ex eo semine madefacto in oleo expressoque, quo utuntur ad nervorum rigores lumborumque et coxendicum et perfrictiones.

- 241 LXXXVIII. Sinapis naturam² effectusque eosdem habere traditur adarca inter silvestria dicta, in cortice calamorum sub ipsa coma nascens.

- LXXXIX. Marrubium plerique inter primas herbas commendavere, quod Graeci prasion vocant, alii linostrophon, nonnulli philopaeda aut philochares, notius quam ut indicandum sit. huius folia semenque contrita prosunt contra serpentes, pectorum et lateris dolores, tussim veterem, et iis qui sanguinem reiecerint eximie utile, scopis eius cum panico aqua decoctis
242 ut asperitas suci mitigetur. inponitur strumis cum adipe. sunt qui viride semen, quantum duobus digitis capiant, cum farris pugillo decoctum addito exiguo olei et salis sorberi ieiunis ad tussim iubeant. alii nihil comparant in eadem causa marrubii et feniculi sucis ad sextarios ternos expressis decoc-tisque ad sextarios duos, tum addito mellis sextario, rursus decocto ad sextarios duos, si coclearii mensura

¹ saluberrimo *vulg. et Mayhoff*: saluberrimae plurimi *codd.*, *Hard., Detlefsen.*

² naturam *vulg. et Detlefsen*: naturae multi *codd.*: naturae esse *Mayhoff.*

^a XVI. § 167.

^c Twisted flax.

^e Loving grace (?).

^b Leek-green.

^d Loving lads (?).

^f Two-grained wheat. See p. 34, n. b.

pounded together, and a handful is swallowed to strengthen the throat, stomach, eyes, head and all the senses, as well as the lassitude of women, being a very wholesome medicine indeed. Taken in vinegar it also disperses stone. To livid places and bruises it is applied with honey and goose-grease, or else with Cyprian wax. From mustard-seed, steeped in olive oil and then compressed, there is extracted an oil, which is used for stiffness of the sinews, loins and hips, and for violent chills.

LXXXVIII. The same nature and properties as those of mustard are said to belong to *adarca*, mentioned in my account of wild plants,^a which grows on the bark of reeds right under the tuft.

LXXXIX. Most authorities have placed among *Horehound.* the especially valuable plants *horehound*, called by some Greeks *prasion*,^b by others *linostrophon*,^c by a few *philopais* ^d or *philochares*,^e a plant too well known to need description. Its leaves and seed pounded together are good for the bites of serpents, pains in the chest and side, and chronic cough; and those who have been troubled with spitting of blood derive extraordinary benefit from its stalks, boiled in water with Italian millet to mellow the harshness of the juice. It is applied externally with grease for scrofula. There are some who prescribe for a cough a two-finger pinch of the fresh seed, boiled down with a handful of emmer^f to which a little oil and salt has been added, to be swallowed by the patients when fasting. Others consider incomparable for the same purpose an extract of *horehound* and *fennel*; three sextarii are extracted and boiled down to two; a sextarius of honey is added and the whole is again boiled down to two. The dose should be a spoonful

PLINY : NATURAL HISTORY

- 243 in die sorbeatur in aquae cyatho. virilium vitiis
 tusum cum melle mire prodest. lichenas purgat ex
 aceto, ruptis, convolsis, spasticis, nervis salutare.
 potum alvum solvit cum sale et aceto, item menstrua
 et secundas mulierum. arida farina cum melle ad
 tussim siccam efficacissima est, item ad gangraenas
 et pterygia. sucus vero auriculis et naribus et
 morbo regio minuendaeque bili cum melle prodest,
 244 item contra venena inter pauca potens. ipsa herba
 stomachum et excreationes pectoris purgat cum iride
 et melle, urinam ciet, cavenda tamen exulceratae
 vesicae et renium vitiis. dicitur sucus et claritatem
 oculorum adiuvere. Castor marrubii duo genera
 tradit, nigrum et quod magis probat candidum. in
 ovum inane sucum addit is ipsumque ovum infundit,
 mel aequis portionibus, tepefactum vomicas rumpere,
 purgare, persanare promittens, inlitis etiam vul-
 neribus a cane factis tuso cum axungia vetere.¹
- 245 XC. Serpyllum a serpendo putant dictum, quod
 in silvestri evenit, in petris maxime; nam sativum
 non serpit, sed ad palmum altitudine increscit.
 pinguius voluntarium et candidioribus foliis ramis-
 que, adversus serpentes efficax, maxime cenchrim et
 scolopendras terrestres ac marinas et scorpiones,

¹ inlitis . . . vetere. *Ita Dellefsen*: promittens. inlinit
 etiam vulneribus a cane factis tusum cum axungia vetere
Mayhoff: inlinit coniectura vetus est, sed tusam tuso tusum codd.

^a *Pterygium* is also a complaint of the eyes.

^b *Serpyllum* from *serpere* (to creep).

^c A kind of spotted serpent.

a day swallowed in a cyathus of water. Pounded horehound with honey is remarkably good for maladies of the male genitals. It clears up lichen if applied in vinegar, and is healing for ruptures, spasms, cramp and the sinews. Taken with salt and vinegar it relaxes the bowels, also helping menstruation and the after-birth. Dried and powdered it is very efficacious with honey for a dry cough, likewise for gangrene and hangnails.^a The juice moreover with honey is good for the ear-laps, nostrils, jaundice, and for lessening the secretion of bile; as an antidote for poisons it is among the few most effective. The plant itself with iris and honey purges the stomach, clears the lungs of phlegm, promotes urine, but should be avoided when there is an ulcerated bladder or the kidneys are affected. The juice is also said to improve the eyesight. Castor records two kinds of horehound, the dark and the white, the latter being preferred by him. He puts horehound juice into an empty egg-shell, and then pours in the egg itself and honey in equal proportions; this mixture warmed he assures us brings abscesses to a head, cleanses them and heals them. Pounded also he applied horehound with old axle-grease to dog bites.

XC. Wild thyme is thought to be so named from *Thyme*. its being a creeping plant; ^b this characteristic is to be found only in the wild kind, mostly in rocky districts; the cultivated does not creep, but grows up to be a palm in height. That growing spontaneously is a more luxuriant plant, with paler leaves and stalks, an efficacious antidote for serpent bites, particularly those of cenchris,^c scolopendras, land or sea, and scorpions, the stalks and leaves being

PLINY: NATURAL HISTORY

- decoctis ex vino ramis foliisque. fugat et odore omnes, si uratur, et contra marinorum venena prae-
 246 cipue valet. capitis doloribus decoctum in aceto inlinitur temporibus ac fronti cum rosaceo, item phreneticis, lethargicis.¹ contra tormina et urinae difficultates, anginas, vomitiones drachmis quattuor ex aqua bibitur; ad iocinerum desiderium² folia obolis quattuor dantur, ad lienem ex aceto. ad cruentas excreationes teritur in cyathis duobus aceti et mellis.
- 247 XCI. Sisymbrium silvestre quibusdam thymbræum appellatum, pedali non amplius altitudine. quod in riguis nascitur simile nasturtio est, utrumque³ efficax adversus aculeata animalia, ut crabrones et similia, quod in sicco odoratum est et inseritur coronis, angustiore folio. sedant utraque capitis dolorem, item epiphoras, ut Philinus tradit. alii
 248 panem addunt, alii per se decocunt in vino. sanat et epinyctidas cutisque vitia in facie mulierum intra quartum diem noctibus inpositum diebusque detractum. vomitiones, singultus, tormina, stomachi dissolutiones cohibet, sive in cibo sumptum sive suco potum.⁴ non edendum gravidis nisi mortuo conceptu, quippe etiam inpositum eicit. movet urinam

¹ Ita dist. Mayhoff coll. Gargilio. Post lethargicis comma, post vomitiones et post desiderium punctum ponit Dellefsen.

² desiderium cum compluribus codd. Dellefsen: desideria cum uno Mayhoff: dolores vulg.

³ utrumque codd. et Dellefsen: tritumque Mayhoff;

⁴ potum codd. et Dellefsen: potō Mayhoff.

boiled in wine. When burnt it keeps away all such creatures by its smell, and is an especially potent antidote for the poison of marine creatures. For headache a decoction in vinegar is applied to the temples and forehead, rose oil being added; so also for phrenitis and lethargus.^a For griping and strangury, for quinsy and vomiting, four drachmae are taken in water. For liver complaints ^b four oboli of the leaves are given, and the same in vinegar for splenic troubles. For spitting of blood it is pounded in two cyathi of oxymel.

XCI. Wild sisymbrium,^c called by some thym- *Sisymbrium*.
braeum, grows no higher than a foot. The sisymbrium growing in watery districts resembles cress, and both ^d are efficacious for the stings of such creatures as hornets; the kind growing on dry soil has a pleasant scent and is used for wreaths. The leaf is narrower. They both relieve headache as well as fluxes from the eyes, according to the testimony of Philinus. Some add bread, but others boil it in wine by itself. It heals night rashes and spots on women's faces within four days if applied at night and taken away during the day. Vomiting, hic-cough, griping and fluxes of the stomach it checks whether taken in food or drunk as juice. It should not be eaten by pregnant women unless the foetus be dead, since even an application of it produces abortion. Taken with wine it is diuretic, the wild

^a For these see pp. xiii-xiv.

^b For this use of *desiderium* see XXII. § 108, XXIII. § 61, XXVII. § 136.

^c A water mint.

^d Apparently the two kinds of sisymbrium mentioned, but there is much to be said for Mayhoff's *tritumque*, "when pounded."

PLINY: NATURAL HISTORY

- cum vino potum, silvestre vero et calculos. quos vigilare opus sit excitat infusum capiti cum aceto.
- 249 XCII. Lini semen cum aliis quidem in usu est, sed et per se mulierum cutis vitia emendat in facie, oculorum aciem suco adiuvat. epiphoras cum ture et aqua aut cum murra ac vino sedat, parotidas cum melle aut adipe aut cera, stomachi solutiones inspersum polentae modo, anginas in aqua et oleo
- 250 decoctum et cum aneso inlitum. torretur, ut alvum sistat. coeliacis et dysintericis inponitur ex aceto. ad iocineris dolores estur cum uva passa, ad phthisim utilissime e semine fiunt ecligmata. musculorum, nervorum, articulorum, cervicium duritias, cerebri membranas mitigat farina seminis nitro aut sale aut cinere additis. eadem cum fico parotidem¹ concoquit ac maturat, cum radice vero cucumeris silvestris extrahit quaecumque corpori inhaereant, sic et
- 251 fracta ossa. serpere ulcus in vino decocta prohibet, eruptiones pituitae cum melle. emendat ungues scabros cum pari modo nasturtii, testium vitia et ramices cum resina et murra et gangraenas ex aqua, stomachi dolores cum feno Graeco sextariis utriusque decoctis in aqua mulsa, intestinorum, thoracis pernicioosa vitia clystere in oleo aut melle.
- 252 XCIII. Blitum iners videtur ac sine sapore aut acrimonia ulla, unde convicium feminis apud

¹ parotidem *coni.* *Ianus*: et idem *codd.*: item *vulg.*: post fico lacunam indicat *Mayhoff*.

kind moreover even expels stone. Those who must remain awake are kept roused by an infusion in vinegar poured on the head.

XCII. Linseed is not only used in combination *Linseed.* with other ingredients, but also by itself removes spots on women's faces, and its juice benefits the eyesight. With frankincense and water or with myrrh and wine it relieves fluxes from the eyes, parotid abscesses with honey or grease or wax, fluxes from the stomach when sprinkled in water like pearl barley, and quinsies when boiled in water and oil and applied externally with anise. It is roasted to check looseness of the bowels. For coeliac trouble and dysentery it is applied in vinegar. For pains of the liver it is eaten with raisins; for consumption electuaries are made from the seed with very useful results. Linseed meal, with soda or salt or ash added, softens indurations of the muscles, sinews, joints and nape of the neck, as well as the membranes of the brain. With a fig it also ripens and brings to a head a parotid abscess; with the root moreover of wild cucumber it extracts bodies sticking into the flesh, including pieces of broken bone. Boiled in wine it prevents a sore from spreading, and with honey checks eruptions of phlegm. With an equal part of cress it cures scabrous nails, with resin and myrrh complaints of the testes and hernia, and in water gangrene. Stomach ache is cured by a decoction of one sextarius of linseed with an equal quantity of fenugreek in hydromel, and dangerous maladies of the intestines and lower trunk by an enema of linseed in oil or honey.

XCIII. Blite seems to be an inactive plant, with- *False spinach.* out flavour or any sharp quality, for which reason in

PLINY : NATURAL HISTORY

Menandrum faciunt mariti. stomacho inutile est. ventrem adeo turbat ut choleram faciat aliquis. dicitur tamen adversus scorpiones potum e vino prodesse, clavis pedum inlini, item lienibus et temporum dolori ex oleo. Hippocrates menstrua sisti eo cibo putat.

- 253 XCIV. Meum in Italia non nisi a medicis seritur et his admodum paucis. duo genera eius: nobilius Athamanticum vel Athamanicum vocant, illi tamquam ab Athamante inventum, hi quoniam laudatissimum in Athamania reperiatur, foliis aneso simile et caule aliquando bipedali,¹ radicibus multis obliquis nigris, quibusdam et altis, minus rufum quam illud alterum. urinam ciet in aqua pota² radice trita vel decocta, inflationes stomachi mire discutit, item tormina et vesicae vitia vulvarumque. articulis cum melle, infantibus cum apio inlitum imo ventri urinas movet.

- 254 XCV. Feniculum nobilitavere serpentes gustatu, ut diximus, senectam exuendo oculorumque aciem suco eius reficiendo, unde intellectum hominum quoque caliginem praecipue eo levare. colligitur hic caule turgescente et in sole siccatur inungiturque ex melle.³ laudatissimus in Hiberia e lacrimis;

¹ bipedali *codd.* et *Deilefsen*: bipedale *Mayhoff*.

² pota *Mayhoff*: potum *Deilefsen*.

³ *Post melle codd.* ubique hoc est *habent*; *uncis inclusit Urlichs*.

^a Not Asiatic cholera, but cholera nostras.

^b With the reading of *Mayhoff*: "Its leaves and stem are like those of anise, and it is, etc."

^c The punctuation, that of *Urlichs*, requires *inlinitur* to be understood in the first clause from *inlitum* in the second. The usual punctuation, comma at *vitia* and no stop at *vulvarumque*, requires the latter to depend on *articulis*, an almost impossible conjunction of words.

^d Book VIII. § 98.

Menander husbands use the name as a term of abuse for their wives. It is injurious to the stomach. It so disturbs the bowels as to cause cholera^a in some persons. It is said however to be good for scorpion stings when drunk in wine, for corns on the feet when applied in a liniment, and also, with oil, for diseases of the spleen and for pain in the temples. Used as a food it is thought by Hippocrates to check menstruation.

XCIV. Spignel is not grown in Italy except by *Spignel*. medical men, and by very few of these. There are two kinds of it. The more famous is called Athamanticum or Athamanicum, because, as some think, it was discovered by Athamas, or according to others because the most esteemed variety is found in Athamania. Its leaves are like those of anise, the stem being sometimes two feet high;^b it has many roots, slanting, dark, and occasionally deep, the plant being less red than the other kind. The root, pounded or boiled and taken in water, is diuretic, and wonderfully good for dispersing flatulence of the stomach, and also for griping and troubles of the bladder and of the womb. With honey it is applied to the joints, and an application with celery to the lower abdomen is diuretic for babies.^c

XCV. Fennel has been made famous, as we have *Fennel*. said,^d by serpents, which taste it to cast off their old skin and with its juice improve their eyesight. Consequently it has been inferred that by fennel juice especially can dimness of human vision also be removed. This juice is collected when the stem is swelling to bud, dried in the sun and applied in honey as an ointment. The most esteemed is gathered in Spain from the tear-drops of the plant.

PLINY : NATURAL HISTORY

fit¹ et e semine recenti et e radicibus prima germinatione incisis.

- 255 XCVI. Est in hoc genere et silvestre quod hippomarathum, alii myrsineum vocant, foliis maioribus, gustu acriore, procerius, baculi crassitudine, radice candida. nascitur in calidis et saxosis. Diocles et aliud hippomarathi genus tradidit, longo et angusto
256 folio, semine coriandri. medicinae in sativo ad scorpionum ictus et serpentium semine in vino potio. sucus et auribus instillatur vermiculosque in his necat. ipsum condimentis prope omnibus inseritur, oxyporis etiam aptissime. quin et panis crustis subditur. semen stomachum dissolutum adstringit, vel in febribus sumptum, nausiam ex aqua tritum sedat, pulmonibus et iocineribus laudatissimum. ventrem sistit, cum modice sumitur, urinam ciet ad tormina potum,² decoctum lactis defectu potum
257 mammas replet. radix cum tisana sumpta renes purgat, sive decoctae suco cum vino sumpto.³ prodest et hydropicis radix ex vino pota, item convulsis. inlinuntur folia tumoribus ardentibus⁴ ex aceto, calculos vesicae pellunt. geniturae abundantiam quoquo modo haustum facit, verendis amicissimum, sive ad fovendum radice cum vino decocta sive contritum in

¹ Post fit dist. Mayhoff, qui cum codd. fit post recenti servat.

² potum Sillig: potu Urlichs, Mayhoff: totum codd.

³ sive decoctae suco cum vino sumpto ego: sive decoctae suco ex vino sumpto Mayhoff: sive decocti suco sive semine sumpto cum codd. Dellefsen. De sive semel posito Mayhoff cf. XVI. l aliosque locos.

⁴ ardentibus Mayhoff: ardente Ianus: ardentes codd.

^a See p. 108, note a.

It is also made from fresh seed and from incisions in the root when germination has first begun.

XCVI. There is in this class of plant a wild variety called hippomarathum, by some myrsineum, with larger leaves and a sharper taste, taller, as thick as a walking-stick, and with a white root. It grows in warm and rocky soils. Diocles has spoken of yet another kind of hippomarathum, with a long, narrow leaf, and a seed like that of coriander. The cultivated kind is used in medicine for the wounds of scorpions and serpents, the seed being taken in wine. The juice is also dropped into the ears, where it kills the worms infesting them. The plant itself is an ingredient of nearly all condiments, being especially suited for digestives. Moreover, it is placed under the crusts of loaves.^a The seed braces a relaxed stomach, even if taken in fevers, relieves nausea if pounded and taken in water, and is a highly praised remedy for complaints of the lungs and liver. It stays looseness of the bowels, if a moderate amount be taken; when taken for griping it is diuretic, and a decoction drunk when milk fails fills the breasts again. The root cleanses the kidneys when taken with barley water, or if the juice of the boiled-down root be drunk with wine. Taken in wine the root is also good for dropsy, likewise for spasms. The leaves are applied in vinegar to inflamed ^b tumours, and they expel stones in the bladder. In whatever way it is taken it creates an abundance of seed, being very soothing to the privates, whether the root be boiled down with wine for a fomentation, or the plant be pounded up and

^a If *ardente* be read: "in strong vinegar"; if *ardentes*, "burning gall-stones."

PLINY : NATURAL HISTORY

- oleo inlitum. multi et suggillatis cum cera inlinunt,
 et radice in suco vel cum melle contra canis morsum
 258 utuntur et contra multipedam ex vino. hippo-
 marathum ad omnia vehementius calculos praecipue
 pellit, prodest vesicae cum vino leni et feminarum
 menstruis haerentibus. efficacius in eo semen quam
 radix. modus in utroque quod duobus digitis tritum
 additur in potionem. Petrichus qui ophiaca scripsit
 et Miccion qui rhizotomumena adversus serpentes
 nihil efficacius hippomaratho putavere. sane et
 Nicander non in novissimis posuit.
- 259 XCVII. Cannabis in silvis primum nata est, nigrior
 foliis et asperior. semen eius extinguere genituram
 dicitur. sucus ex eo vermiculos aurium et quod-
 cumque animal intraverit eicit, sed cum dolore
 capitis, tantaque vis ei est ut aquae infusus coagulare
 eam dicatur. et ideo iumentorum alvo succurrit
 potus in aqua. radix articulos contractos emollit in
 aqua cocta, item podagras et similes impetus.
 ambustis cruda inlinitur, sed saepius mutati
 priusquam arescat.
- 260 XCVIII. Ferula semen aneto simile habet. qua
 ab uno caule dividitur in cacumine femina putatur.
 caules eduntur decocti, commendanturque muria ac
 melle, stomacho utiles.¹ sin plures sumpti, capitis
 dolorem faciunt. radix denarii pondere in vini
 cyathis duobus bibitur adversus serpentes, et ipsa
 radix inponitur. sic et torminibus medetur, ex oleo

¹ utiles *Mayhoff*: utilis *codd.*

^a Or possibly "persistent."

^b Nicander, *Theriaca*, p. 596.

^c Cf. § 228 and note on XXII. § 122.

^d Or "recommended."

applied in oil. Many also apply it with wax to bruises, and use the root in the juice or with honey for dog bites, and in wine for the sting of the mul-tipede. Hippomarathum is for all purposes more drastic, expelling stone particularly well, and with a soft wine doing good to the bladder and to retarded ^a menstruation. In this the seed is more efficacious than the root. The dose of either is a two-finger pinch, ground and added to drink. Petrichus who wrote *Serpent-lore* and Miccion, author of *Pre-scriptions from Roots*, thought nothing more efficacious than hippomarathum for serpent bites. Nicander ^b indeed also has placed it far from last in his list of antidotes.

XCVII. Hemp at first grew in woods, with a *Hemp*. darker and rougher leaf. Its seed is said to make the genitals impotent. The juice from it drives out of the ears the worms and any other creature that has entered them, but at the cost of a headache; so potent is its nature that when poured into water it is said to make it coagulate. And so, drunk in their water, it regulates the bowels of beasts of burden. The root boiled in water eases cramped joints, gout too and similar violent pains.^c It is applied raw to burns, but is often changed before it gets dry.

XCVIII. Fennel-giant has a seed similar to that *Fennel-giant*. of dill. The kind with one stem divided at the top is supposed to be female. The stems are eaten boiled, and are made tasty ^d with brine and honey, being good for the stomach. If however too many are eaten they cause headache. One denarius of the root in two cyathi of wine is taken for serpent bites, and the root itself is applied to them. So administered it also cures griping, and in oil and

PLINY : NATURAL HISTORY

- autem et aceto contra sudores inmodicos vel in
 261 febribus proficit. sucus ferulae alvum solvit fabae
 magnitudine devoratus. e viridi medulla vulvis
 utilis est et¹ ad omnia ea vitia. ad sanguinem sis-
 tendum decem grana seminis bibuntur in vino trita
 vel cum medulla. sunt qui comitialibus morbis
 dandum putent luna IIII usque VII lingulae men-
 sura. natura ferularum murenis infestissima est,
 tactae siquidem ea moriuntur. Castor radicis sucum
 et oculorum claritati conferre multum putavit.
- 262 XCIX. Et de carduorum satu inter hortensia
 diximus, quapropter et medicinam ex his non
 differamus. silvestrium genera sunt duo, unum
 fruticosius a terra statim, alterum unicaule crassius.
 utrique folia pauca, spinosa, muricatis cacuminibus,
 sed alter florem purpureum mittit inter medios
 aculeos celeriter canescentem et abeuntem cum
 263 aura; *σκόλυμον* Graeci vocant. hic antequam floreat
 contusus atque expressus inlito suco alopecias replet.
 radix cuiuscumque ex aqua decocta potoribus sitim
 facere narratur. stomachum corroborat et vulvis, si
 credimus, etiam conferre aliquid traditur ut mares
 gignantur. ita certe Glaucias scripsit qui circa
 carduos diligentissimus videtur. mastiche e carduis
 odorem commendat oris.

¹ est et *ego* : est *aut* et *codd.*

^a See XIX. § 152.

^b Golden thistle.

vinegar it checks profuse perspirations, even in fevers. To swallow the juice of fennel-giant, of the size of a bean in quantity, loosens the bowels. The pith from the fresh plant is good for the womb, and for all the complaints I have mentioned. To stop bleeding ten seeds are ground and taken in wine or with some pith. There are some who think that the seed should be given for epilepsy from the fourth day of the moon to the seventh, in doses of one spoonful. The nature of fennel-giant is very poisonous to the murena, a mere touch causing death. Castor thought that the juice of the root was also very beneficial to the eyesight.

XCIX. We have also spoken^a in our description of garden plants of the cultivation of thistles, and so we should not put off a discussion of their medical value. Of wild thistles there are two kinds: one being more bushy as soon as it leaves the earth, the other is thicker, but has only one stem. Both kinds have only a few leaves, prickly and with pointed heads, but the latter puts forth in the middle of its points a purple flower, that quickly turns white and is gone with the wind; the Greeks call it *σκόλυμος*.^b If this kind be pounded and compressed before it flowers, an application of the juice restores skin and hair lost by mange. The root of any kind boiled in water is said to create thirst in those who are drunkards. It strengthens the stomach, and, if we may believe the report, it also affects the womb in such a way that male children are engendered. Glaucias, at any rate, who seems to have been a most careful student of thistles, put this statement on record. A gum-like mastich coming from thistles makes the breath sweet.

Thistles.

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- 264 C. Et discessuri ab hortensiis unam compositionem ex his clarissimam subteximus adversus venenata animalia incisam in lapide versibus Coi in aede Aesculapi: serpylli duum denariorum pondus, opopanax et mei tantundem singulorum, trifolii seminis pondus denarii, anesi et feniculi seminis et ami, et apii denarium senum e singulis generibus, ervi farinae denarium xii. haec tusa cribrataque vino quam possit excellenti digeruntur in pastillos victoriati ponderum. ex his singuli dantur ex vini mixti cyathis ternis. hac theriace Magnus Antiochus rex adversus omnia venenata usus traditur aspide excepta.
-

^a Juice of all-heal.

^b Perhaps *seminis* is understood with *ami* and *apii*: "ami seed and parsley seed." For "parsley" perhaps read "celery."

BOOK XX. c. 264

C. And now that I am about to leave garden plants, I have appended a very famous preparation from them which is used to counteract the poison of venomous animals. It is carved in verse upon a stone in the temple of Aesculapius in Cos. Take two denarii of wild thyme, and the same of opopanax^a and of spignel respectively, one denarius of trefoil seed, of aniseed, fennel-seed, ami and parsley,^b six denarii respectively, and twelve denarii of vetch meal. These are ground and passed through a sieve, and then kneaded with the best wine obtainable into lozenges, each of one victoriatus.^c One of these is given at a time mixed with three cyathi of wine. King Antiochus the Great is said to have used this preparation as an antidote for the poison of all venomous creatures except the asp.

^c This coin, stamped with a figure of Victory, was half a denarius in weight.

BOOK XXI

LIBER XXI

I. IN hortis seri et coronamenta iussit Cato, inenarrabili florum maxime subtilitate, quando nulli potest facilius esse loqui quam rerum naturae pingere, lascivienti praesertim et in magno gaudio
2 fertilitatis tam variae ludenti. quippe reliqua usus alimentique gratia genuit, ideoque saecula annosque tribuit his, flores vero odoresque in diem gignit, magna, ut palam est, admonitione hominum, quae spectatissime floreant celerrime marcescere. sed ne pictura quidem sufficit¹ imagini colorum reddendae mixturarumque varietati, sive alterni atque multiplices inter se nectuntur,² sive privatis generum funiculis in orbem, in oblicum, in ambitum quaedam coronae per coronas currunt.

¹ sufficit *Dal.*: sufficienti aut sufficiente *codd.*: sufficiet *Mayhoff*. Post marcescere comma ponit *Detlefsen*, qui sufficiente scribit.

² nectuntur *Detlefsen*: nectantur cum *codd.* *Mayhoff*, qui etiam currant coni.

^a *R.r.* VIII. § 2.

^b The old editors put a full stop at *ambitum*. The MSS. have *nectantur* and *currunt*. *Detlefsen* has two indicatives and *Mayhoff* two subjunctives.

Alterni: two kinds of flowers interwoven alternately.

Multiplices: several kinds interwoven according to various patterns.

Privatis generum funiculis: strings or festoons of flowers, one kind only on each string. These are made into hoops or rings, which pass through one another, each ring being a link in a chain. This chain of rings could easily be shaped

BOOK XXI

I. CATO^a bade us include among our garden plants chaplet flowers, especially because of the indescribable delicacy of their blossoms, for nobody can find it easier to tell of them than Nature does to give them colours, as here she is in her most sportive mood, playful in her great joy at her varied fertility. To all other things in fact she gave birth because of their usefulness, and to serve as food, and so has assigned them their ages and years; but blossoms and their perfumes she brings forth only for a day—an obvious warning to men that the bloom that pleases the eye most is the soonest to fade. Not even the painter's art, however, suffices to copy their colours and the variety of their combinations, whether two kinds are woven together alternately, and also more than two, or whether with separate festoons of the different kinds chaplets are run through chaplets to form a circle, or crosswise, or sometimes forming a coil.^b

Chaplets, the various kinds.

in orbem, or coiled, like a watch-spring, *in ambitum*, or bent at an angle *in oblicum*. The last however may refer to pairs of separate rings, the smaller passing through the larger at right-angles.

Warmington's explanation is:—

In orbem: forming (filled in) disks;

In oblicum: forming spirals, or coils;

In ambitum: forming rings (hollow disks not filled in nor spiral). *Ambitus* suggests a closed periphery, not filled in.

Pliny has not been careful to give details to his readers,

[Note continued on p. 162.]

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- 3 II. Tenuioribus utebantur antiqui stroppos appellantes, unde nata strophiola. quin et vocabulum ipsum tarde communicatum est inter sacra tantum et bellicos honores coronis suum nomen vindicantibus. cum vero e floribus fierent, sorta a serendo serieve appellabantur, quod apud Graecos quoque non adeo antiquitus placuit.
- 4 III. Arborum enim ramis coronari in sacris certaminibus mos erat primum. postea variare coeptum mixtura versicolori florum, quae invicem odores coloresque accenderet, Sicyone ingenio Pausiae pictoris atque Glycerae coronariae dilectae admodum illi, cum opera eius¹ pictura imitaretur, illa provocans variaret, essetque certamen artis ac naturae, quales etiam nunc extant artificis illius tabellae atque in primis appellata Stephaneplocos

¹ *Hic addere vult huius Warmington.*

who would find them unnecessary, being perfectly familiar with them.

Another translation has been suggested to me by Professor W. B. Anderson, who thinks that *alterni* may have its late sense of *in vicem*, and that *quaedam* does not mean "certain," but "as it were," "so to speak." He would translate: "whether they are intertwined with one another in elaborate convolutions, or form as it were garlands within garlands with strings of particular flowers arranged in rings or slantwise or running right round."

If with the old editors we put a stop (or even a semicolon) at *ambitum*, the sense of the first part of the sentence is improved, for *funiculi* could be twined *in orbem* etc. more naturally than could strings of *coronae*. The difficulty however remains of distinguishing *in orbem* from *in ambitum*, and the words *quaedam . . . currunt* by themselves form a very jerky and obscure sentence.

BOOK XXI. II. 3-III. 4

II. ^a Such ornaments were more meagre as used by the ancients, who called them stropi, from which is derived our strophium. Moreover, a general word was itself slow in coming into use, as "corona" was confined to the ornaments used at sacrifices or as military honours. When however garlands came to be made of flowers, they were called *serta*,^b from *serere*^c or *series*.^d The Greeks too adopted this custom^e not so long ago.

III. For at first it was customary to make from branches of trees the chaplets used at sacred contests as prizes. Later on the custom arose of varying the colour by mixing flowers of different hues, in order to heighten the effect of perfumes and colours in turn. It began at Sicyon through the skill of Pausias the painter and of the garland-maker Glycera, a lady with whom he was very much in love; when^f he copied her works in his paintings, she to egg him on varied her designs, and there was a duel between Art and Nature. Pictures of this kind painted by that famous artist are still extant, in particular the one called Stephaneplocos,^g in which

^a Perhaps: "Chaplets as used by the ancients were more meagre. . . . Moreover, the name 'corona' itself was slow in becoming a general term, as it asserted a special claim to be used only of sacrificial ornaments and of military honours." *Coronis* is the only noun actually used in Chapter I that can readily be understood with *tenuioribus*, but it makes better sense to regard the latter as a substantive.

^b "Wreaths," literally, "plaited (flowers)."

^c "To weave together."

^d "A line of connected things."

^e Namely, of using flowers to make garlands.

^f Warmington would translate, with the addition of *huius*, "when this man's painting imitated her works."

^g Garland weaver.

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qua pinxit ipsam. idque factum est post Olympiada
 5 c. sic coronis e floribus receptis paulo mox subiere
 quae vocantur Aegyptiae ac deinde hibernae, cum
 terra flores negat, ramento e cornibus tincto.
 paulatimque et Romae subrepsit appellatio corollis
 inter initia propter gracilitatem nominatis, mox et
 corollariis, postquam e lamina tenui aerea inaurata
 aut inargentata dabantur.

6 IV. Crassus Dives primus argento auroque folia
 imitatus ludis suis coronas dedit, accesseruntque et
 lemnisci, quos adici ipsarum coronarum honor erat,
 propter Etruscas quibus iungi nisi aurei non debe-
 bant. puri diu fuere hi. caelare eos primus
 instituit P. Claudius Pulcher brattiasque etiam
 philyrae dedit.

7 V. Semper tamen auctoritas vel ludicro quaesi-
 tarum fuit. namque ad certamina in circum per
 ludos et ipsi descendebant et servos suos equosque
 mittebant. inde illa XII tabularum lex: qui coro-
 nam parit ipse pecuniave eius, virtutis suae ergo
 duitur ei. quam servi equive meruissent pecunia
 partam lege dici nemo dubitavit. quis ergo honos?
 ut ipsi mortuo parentibusque eius, dum intus positus

^a 380-376 B.C.

^b Referring to the force of the diminutive *corolla*.

^c "Chaplet" seems to be the best word by which to
 translate *corona*, but some of the dignity of the Latin word is
 lost. Unfortunately "crown," which keeps this dignity, is
 too suggestive of royalty.

^d Used as we use bast, as a sort of core in the making of a
 chaplet and its appendages.

Warmington, *Remains of Old Latin*, vol. III, pp. 500-502.

he painted the lady herself. This took place later than the hundredth Olympiad.^a Floral chaplets being now fashionable, it was not long before there appeared what are called Egyptian chaplets, and then winter ones, made from dyed flakes of horn at the season when earth refuses flowers. At Rome too gradually there crept in the name *corollae*, given at the first to chaplets because of their delicacy,^b and presently that of *corollaria*, after the chaplets presented as prizes began to be made of thin plates, bronze, gilt or silvered. .

IV. Crassus the Rich was the first to make artificial leaves of silver or gold, giving chaplets^c of them as prizes at his games, to which were also added ribbons. For these to be attached increased the honour of the bare chaplet; this fashion was due to the Etruscan chaplets, to which properly only golden ribbons were fastened. For a long time these ribbons were plain. The custom of engraving them originated with P. Claudius Pulcher, who also added gold-leaf to the inner bark of the lime tree.^d

V. Chaplets, however, even those won in sport, were always regarded as a dignity, for citizens would go down to the Circus in person to compete in the games, besides entering for events their own slaves and horses. This custom explains that law of the Twelve Tables:^e "Whoso wins a chaplet in person or by his chattel, let it be given him on the ground of his worth." No one has doubted that by the "chaplet won by his chattel" the law means that earned by slaves or by horses. What then was the honour? It lay in the indefeasible right, on the death of the victor or of his parents, to have the chaplet laid on the body during the lying in state at home and when it was

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- esset forisve ferretur, sine fraude esset inposita, alias in usu promiscuo ne ludicrae quidem erant, 8 (VI.) ingensque et hinc severitas. L. Fulvius argentarius bello Punico secundo cum corona rosacea interdiu e pergula sua in forum prospexisse dictus ex auctoritate senatus in carcerem abductus non ante finem belli emissus est. P. Munatius cum demptam Marsuae coronam e floribus capiti suo inposuisset atque ob id duci cum in vincula triumviri iussissent, 9 appellavit tr. pl., nec intercessere illi, aliter quam Athenis, ubi commissabundi iuvenes ante meridiem conventus sapientium quoque doctrinae frequentabant. apud nos exemplum licentiae huius non est aliud quam filia divi Augusti, cuius luxuria noctibus coronatum Marsuam litterae illius dei gemunt.¹
- 10 VII. Florum quidem populus Romanus honorem Scipioni tantum habuit. Serapio cognominabatur propter similitudinem suarii cuiusdam negotiatoris. obierat in tribunatu² plebei admodum gratus dignusque Africanorum familia, nec erat in bonis funeris impensa. asses ergo contulit populus ac funus elocavit, quaque praeferebatur flores e prospectu omni sparsit.
- 11 VIII. Et iam tunc coronae deorum honos erant et larum publicorum privatorumque ac sepulchrorum

¹ dei gemunt *cum* *codd.* Mayhoff: diei gemunt *Urlichs*: degemunt *Detlefsen*.

² tribunatu *codd.*: consulatu *coni.* *Urlichs*.

^a They as revellers would wear garlands.

^b Or reading *diei*: "of that day." *Detlefsen's degemunt* is attractive, but the word lacks authority. "That god" will be Augustus.

^c *Urlichs* would read *consulatu* because the Scipios were a patrician family, and so not eligible for the tribunate. Perhaps a scribe, mistaking *plebei* as genitive of *plebes*, mis-corrected *consulatu* to *tribunatu*, or this Scipio may have been *tribunus militum*.

being carried out to burial. At other times not even chaplets won at the games were worn indiscriminately, (VI.) and on this matter extremely severe rules were enforced. In the second Punic War L. Fulvius, a banker, who was said to have looked out into the Forum from his veranda wearing in the daytime a chaplet of roses, was on the authority of the senate led away to prison, not being released before the end of the war. P. Munatius took a chaplet of flowers from a statue of Marsyas and placed it on his own head. Ordered by the Triumviri to be put in chains for this offence he appealed to the tribunes of the people, who refused to intervene. Very different was the custom at Athens, where young revellers ^a in the forenoon would resort even to the schools of the philosophers. Among us no other instance of this outrageous conduct has taken place except that of Julia, daughter of the late Augustus, who in her night frolics placed a chaplet on the statue of Marsyas, as a letter of that god ^b deploras.

VII. Flowers as a distinction have been given by the Roman people only to a Scipio. He was surnamed Serapio because of his likeness to a pig-dealer of that name. He died in his tribunate,^c being high in the esteem of the common people and worthy of the family of the Africani, but not leaving enough estate to pay for his funeral. So the people contracted for his funeral, contributing their pence, and scattered flowers from every point of vantage along all the route.

VIII. Already by that time chaplets were used to honour the gods, the lares public and private, tombs and spirits of the dead; the highest distinction was

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et manium, summaque auctoritas pactili coronae, ut in Saliorum sacris invenimus sollemnes † cenas †.¹ transiere deinde ad rosaria, eoque luxuria processit ut non esset gratia nisi mero folio subtilibus, mox petitis ab India aut ultra Indos. lautissimum quippe habetur e nardi folio eas dari aut veste Serica versicolori, unguentis madida. hunc habet novissime exitum luxuria feminarum.

- 12 IX. Et apud Graecos quidem de coronis privatim scripsere et Mnesitheus atque Callimachus medici quae nocerent capiti, quoniam et in hoc est aliqua valitudinis portio, in potu atque hilaritate praecipue odorum vi subrepente fallaciter, scelerata Cleopatrae sollertia. namque in apparatu belli Actiaci gratificationem ipsius reginae Antonio timente nec nisi praegustatos cibos sumente fertur pavore² eius luisse extremis coronae floribus veneno inlitis ipsaque capiti inposita, mox procedente hilaritate invitavit Antonium ut coronas biberent. quis ita timeret insidias? ergo concerpta³ in scyphum incipienti haurire opposita manu: en ego sum, inquit illa, Marce Antoni, quam tu nova praegustantium diligentia caves, adeo mihi, si possim sine te vivere, occasio aut ratio deest! inde⁴ inductam custodiam

¹ cenas *codd.*: cenae (sc. transiere) *coni.* Mayhoff: ego ut *spurius* notavi. Fortasse scriba ita sacris interpretatus est.

² pavore *cum plerisque codd.* Mayhoff: pavorem Sillig et Dellefsen. Confer IX. § 139 et XI. § 123 Mayhoff.

³ concerpta *cum codd.* Dellefsen: concerptam Mayhoff.

⁴ inde *add.* Lipsius.

^a I.e., with no *philyra*.

^b Or: "raided the rose-gardens."

^c Others take it to mean "her head." If this be correct, the translation of the lines that follow must be slightly altered.

the plaited chaplet,^a such as we find always used in ceremonies of the Salii. Then they changed over to rose wreaths,^b and to such a height did luxuriousness rise that no chaplet was fashionable except those stitched together with genuine petals only, presently only those fetched from India or even beyond. In fact the chaplet deemed the smartest prize is made of nard leaves, or of multi-coloured silk steeped in perfumes. Such is the latest form taken by the luxury of our women.

IX. Among the Greeks indeed there have been written monographs on chaplets by Mnesitheus and Callimachus, physicians who specify what flowers are injurious to the head; for health is to a certain extent concerned even in this matter, because it is especially amid the gaiety of drinking parties that strong scents steal unawares to the head, witness the wicked cunning of Cleopatra. For in the preparation for the war that culminated at Actium, Antonius, fearing even the attentiveness of the queen herself, would not take food that had not been foretasted. She is said to have played on his terror by poisoning the tips of the flowers in his chaplet, and then to have laid it on his ^c head. Presently, as the revelry grew wilder, she proposed as a challenge that they "should drink their chaplets." Who in such circumstances would suspect treachery? So having gathered the fragments of his chaplet into his cup he was beginning to drink, when she laid on him an arresting hand, with these words: "Look, I am the woman, Marcus Antonius, against whom, with your new craze for foretasters, you are carefully on your guard. Such my lack of opportunity or means to act if I can live without you!" Then a

*A story
about
Cleopatra.*

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- 13 bibere iussit ilico expirantem. de floribus supra dictos scripsit Theophrastus apud Graecos, ex nostris autem inscripsere aliqui libros anthologicon, flores vero persecutus est nemo, quod equidem inveniam. nec nos nunc scilicet coronas nectemus—id enim frivolum est—sed de floribus quae videbuntur digna memorabimus.
- 14 X. Paucissima nostri genera coronamentorum inter hortensia novere, ac paene violas rosasque tantum. Rosa nascitur spina verius quam frutice, in rubo quoque proveniens, illic etiam iucundi odoris, quamvis angusti. germinat omnis primo inclusa granoso cortice, quo mox intumescente et in virides alabastros fastigato paulatim rubescens dehiscit ac sese pandit in calicem medio sui stantes complexum¹ luteos
- 15 apices. usus eius in coronis prope minimus est. oleo maceratur, idque iam a Troianis temporibus Homero teste. praeterea in unguenta transit, ut diximus. medicas per se artes praebet. emplastris atque collyriis inseritur mordaci subtilitate, mensurarum etiam deliciis perunguendis minime noxia.²

¹ calicem . . . complexum sic *Detlefsen*: in calice medio staminis complexa *Mayhoff*: calices, sui stanti, complexa *codd.*

² *Post noxia add. carie e Pausania IX. 41, 7 Mayhoff.*

^a That is, "I shall not describe the methods of making them."

^b *I.e.* our wild roses.

^c With the reading of *Mayhoff*: "it opens out, enclosing in the middle of the cup the yellow points of the stamens." With this reading *apices* would mean the points *and* the filaments, not the points only.

prisoner was brought in and ordered by her to drink, who died on the spot. About flowers, besides the authors already mentioned, an account has been written by Theophrastus among the Greeks, and some of our own writers have composed books of *Anthologica*. Nobody has, however, followed up the subject of flowers fully, so far as I can discover. Nor shall I now, of course, put chaplets together^a—for that would be mere trifling—but I shall include everything about flowers that will seem worthy of record.

X. Our countrymen know among garden plants *Roses.* very few kinds of chaplet flowers, practically violets only and roses. The rose grows on what is not so much a shrub as a thorn, appearing also on a bramble;^b there too it has a pleasant though faint perfume. Every bud appears at first enclosed in a shell full of grains, which presently swells and, after sloping itself into a green cone like a perfume box, gradually reddens, splitting and spreading out into a cup, which encloses the yellow points that stand out of its centre.^c To make chaplets is about the least of the uses of the rose. It is steeped in oil, a process known even at the time of the Trojan war, as Homer bears witness.^d Furthermore, it has made its way, as we have said,^e into ointments. By itself it possesses medicinal properties. It is an ingredient of plasters and of eye-salves by reason of its subtle pungency, even being used as a coating for the delicacies of our tables, being quite harmless.^f The most famous

^a *Iliad* XXIII. 186.

^b See Book XIII § 9.

^f In defence of his conjecture Mayhoff refers to Pausanias IX. 41, 7, where the unguent of the rose is said to preserve wood from decay.

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- 16 genera eius nostri fecere celeberrima Praenestinam et Campanam. addidere alii Miliesiam, cui sit ardentissimus colos non excedenti¹ duodena folia, proximam ei Trachiniam minus rubentem, mox Alabandicam viliorem, albicantibus foliis, vilissimam vero plurimis, sed minutissimis, spiniolam. differunt enim multitudine foliorum, asperitate, levore, colore, 17 odore. paucissima quina folia, ac deinde numerosiora, cum sit genus eius quam centifoliam vocant, quae est in Campania Italiae, Graeciae vero circa Philippos, sed ibi non suae terrae proventu. Pangaeus mons in vicino fert numerosis foliis ac parvis, accolae transferentes conserunt, ipsaque plantatione proficiunt. non autem talis odoratissima est, nec cui latissimum maximumve folium, breviterque in- 18 dicium est odoris scabritia corticis. Caepio Tiberii Caesaris principatu negavit centifoliam in coronas addi, praeterquam extremas velut ad cardines, nec odore nec specie probabilem. est et quae Graeca appellatur a nostris, a Graecis lychnis, non nisi in umidis locis proveniens, nec umquam excedens quinque folia, violaeque magnitudine, odore nullo. est et alia Graecula appellata, convolutis foliorum paniculis, nec dehiscens nisi manu coacta semperque

¹ excedenti *Hard. et Dellefsen*: excedentis *codd. et Mayhoff*, qui cuius pro cui sit *coni.*

* Probably this refers to the number of prickles on the stalks, although *scabritia* is usually roughness of a less prickly type, and *cortex* in § 14 and in § 20 is the outer skin enclosing the whole bud. See also § 121.

^b This is probably not a rose at all, but *Agrostemma coronaria* of Linnaeus, though this is much taller than any "violet."

kinds of roses recognized by our countrymen are those of Praeneste and those of Campania. Some have added the Milesian rose, because of its brilliant fiery colour, though it never has more than twelve petals. Next after it is esteemed the Trachinian, of a less brilliant red, and then the Alabandian, less highly prized, with whitish petals; the least prized, having very many, but very small petals, is called the prickly rose. For roses differ in the number of their petals, in the smooth or rough nature of the stem, in colour and in perfume. Those with the fewest petals have five, but in other roses they are more numerous, since there is one kind called the hundred-petalled rose. In Italy this grows in Campania, but in Greece around Philippi, which however is not its native soil. Mount Pangaeus in the neighbourhood grows a rose with many but small petals. The natives transplant it, improving the variety by mere change of place. This kind, however, has not a very strong perfume, nor has any rose whose petal is very broad or large; in brief, an indication of the degree of perfume is the roughness of the bark.^a Caepio, who lived when Tiberius Caesar was Emperor, said that the hundred-petalled variety is never put into chaplets, except at the ends where these are as it were hinged together, since neither in perfume nor in appearance is it attractive. There is also the kind called the Grecian rose by our countrymen, and by the Greeks the *lychnis* (lamp rose), which appears only in moist localities.^b It never has more than five petals, is of the size of the violet, and has no perfume. Another kind is called *Graecula* (little Greek rose), the petals of which are rolled together into a bunch. It never opens unless

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- 19 nascenti similis, latissimis foliis. alia funditur e caule malvaceo folia oleae habente—mucetum vocant—, atque inter has media magnitudine autumnalis quam coroniolam appellant, omnes sine odore praeter coroniolam et in rubo natam. tot modis adulteratur. et alias vera quoque plurimum solo praevalet. Cyrenis odoratissima est, ideoque ibi unguentum pulcherrimum, Carthagine Hispaniae hieme tota praecox. refert et caeli temperies, quibusdam enim annis minus odorata provenit,
- 20 praeterea omnis siccis quam umidis odoratior. seri neque pinguibus volt neque argillosis locis nec riguis, contenta ruderibus,¹ proprieque ruderatum agrum amat. praecox Campana est, sera Milesia, novissime tamen desinit Praenestina. fodiuntur altius quam fruges, levius quam vites. tardissime proveniunt semine, quod in ipso cortice est, sub ipso flore, opertum lanugine. ob id potius caule conciso inseruntur. et ocellis radiceis, ut harundo, unum genus inseritur pallidae, spinosae, longissimis virgis,

¹ ruderibus *Detlefsen*: roribus *Mayhoff*: ruderaceum *quattuor codd.*: ruribus *aut raribus alii*.

^a The spelling is doubtful, as is of course the kind of rose referred to. Some think it not to be a rose at all.

^b Apparently referring to the last four kinds mentioned. But these do not include a rose "growing on the bramble," which is mentioned early in the chapter, where it is said to have a perfume, but a faint one. The different kinds of wild rose may include some, if not most, of these doubtful cases.

^c The meaning is uncertain, probably being that there are many counterfeit roses, as it were, not true members of the family.

^d It seems impossible to decide whether *odoratissimus* and *odoratior* refer to the strength of the scent or to its quality, or to both.

forced by the hand, and is always like a bud; the petals are very broad. Another kind springs from a stem like that of the mallow, with leaves like olive leaves, called mucetum.^a Between these ^b in size is an autumn rose, named coroniola (little chaplet); all of these ^b are without perfume except coroniola and the rose growing on a bramble. In so many ways is spuriousness possible!^c In other districts too the genuine rose also depends to a very great extent upon the soil for its main characteristics. The rose of Cyrene has the finest perfume,^d for which reason the choicest ointment is to be obtained there. At Carthage in Spain there is an early rose that blossoms throughout the winter. Weather too makes a difference; for in certain years the rose grows with less perfume, and furthermore all roses have more perfume on dry soils than on moist. It likes to be grown on soils that are neither rich nor clayey nor irrigated, being content with a rubbly soil,^e and fond in particular of ground on which rubble has been spread. The Campanian rose is early, the Milesian late, but the one that continues to flower the latest is the Praenestine. The ground is dug deeper for roses than for crops,^f but shallower than for vines. They are very slow in growing from the seed, which is in the shell itself, right under the flower, and covered with down. For this reason it is preferred to graft shoots into an incision in the stem. And into the eyelets of the root, as with the reed, there is grafted one kind of rose that is pale, prickly, with

^a With Mayhoff's reading, "dews."

^f *Fruges* is a word with a fairly wide range of meanings, but here seems to refer to leguminous and cereal plants, etc., and not to fruit-trees.

PLINY : NATURAL HISTORY

- 21 *quinquefoliae*, quae Graecis altera est. omnis autem recisione atque ustione proficit, tralatione quoque, ut vites, optime ocissimeque provenit surculis- quaternum digitorum longitudine aut ampliore post vergiliarum occasum sata, dein per favonium translata pedalibus intervallis crebro circumfossa. qui praecocem faciunt pedali circa radicem scrobe aquam calidam infundunt germinare incipiente calice.
- 22 XI. *Lilium rosae* nobilitate proximum est et quadam cognatione unguenti oleique, quod lilinum appellatur. et inpositum etiam maxime rosas decet
- 23 medio proventu earum incipiens. nec ulli florum excelsitas maior, interdum cubitorum trium, languido semper collo et non sufficiente capitis oneri. candor eius eximius foris striati et ab angustis in latitudinem paulatim sese laxantis effigie calathi, resupinis per ambitum labris tenuique pilo et stamine,¹ stantibus in medio crocis. ita odor colorque duplex, et alius calicis alius staminis, differentia angusta.² in unguenti vero oleique usu et folia non spernuntur. est flos non dissimilis illi in herba quam convolvulum

¹ stamine *Detlefsen* : semine *codd.* : staminis (*sine commate*) *Mayhoff*.

² angusta *cum codd.* *Mayhoff* : etiam gustu *Detlefsen*.

^a The "first" Greek kind would be the *lychnis* of § 18.

^b See II. § 125 where Pliny tells us that the Pleiades set on 11 November and (§ 123) rise on 10 May, giving the beginning of summer. For west wind, see p. 211, note *h*.

^c The madonna lily, *Lilium candidum*.

^d Usually in shape like a truncated cone.

^e I think that *pilo* refers to pistil and *stamine* to the stamens. The reading here is doubtful, as is the construction of the ablatives. Possibly: "the *croci* (anthers) standing in the centre with slender filaments and pistil."

^f With *Detlefsen's* conjecture: "even in taste."

very long twigs and five petals, the second among the Greek roses.^a Every rose however improves with pruning and burning; by transplanting also, as with vines, there is the best and quickest success if slips of the length of four fingers or more are planted after the setting of the Pleiades,^b and then transplanted at intervals of one foot while the west wind is blowing, the earth being frequently turned over around them. Those who try to get their roses early, dig a trench a foot deep about the root, pouring in warm water as the cup is beginning to bud.

XI. The lily^c comes nearest to the rose in fame, *Lilies.* and there is a certain relationship shown in the ointment and oil, which they call lili^{um} (oil of lilies). When blended with roses, also, the lily gives a grand combination, making its first appearance when the rose is in mid-season. No flower grows taller; sometimes it reaches three cubits, its neck always drooping under the weight of a head too heavy for it. The flower is of an exceeding whiteness, fluted on the outside, narrow at the bottom and gradually expanding in width after the fashion of a basket.^d The lips curve outwards and upwards all round; the slender pistil and stamens,^e the colour of saffron, standing upright in the centre. So the perfume of the lily, as well as its colour, is two-fold, there being one for the corolla, and another for the stamens, the difference being slight.^f In fact when it is used to make ointment or oil the petals too are not despised. There is a flower not unlike the lily growing on the plant called the convolvulus,^g that

^g This is not a lily, but the great white convolvulus, or Devil's Garter.

PLINY : NATURAL HISTORY

- vocant, nascens per frutecta, nullo odore nec crocis
 intus, candorem tantum referens ac veluti naturae
 24 rudimentum lilia facere condiscantis. alba lilia
 isdem omnibus modis seruntur quibus rosa, et hoc
 amplius lacrima sua ut hipposelinum, nihilque est
 fecundius una radice quinquagenos saepe emittente
 bulbos. est et rubens lilium quod Graeci crinon
 vocant, alii florem eius cynorrhodon. laudatissimum
 in Antiochia ac Laudicea Syriae, mox in Phaselide.
 quartum locum optinet in Italia nascens.
- 25 XII. Sunt et purpurea lilia, aliquando gemino caule,
 carnosiore tantum radice maiorisque bulbi, sed
 unius, narcissum vocant. huius alterum genus flore
 candido, calice purpureo. differentia a liliis est et
 haec, quod narcissis in radice folia sunt, probatis-
 simis in Lyciae montibus. tertio generi cetera
 eadem, calix herbaceus. omnes serotini, post arc-
 turum enim florent ac per aequinoctium autumnum.
- 26 XIII. Inventa est in his ratio inficiendi¹ monstifica²
 hominum ingeniis. colligantur³ namque mense Iulio

¹ inficiendi *Sillig*: inferendi *codd.*: inserendi *Deilefsen, Mayhoff*.

² monstifica (*cum serendi*) *coni. Mayhoff*: monstificis *Deilefsen, et (in textu) Mayhoff cum codd.*

³ colligantur *Schneider, Mayhoff*: colliguntur *codd.*

^a The methods, of course, are quite dissimilar.

^b As far as we can see the crinon was really white.

^c Not, of course, our dog-rose.

^d The Romans had a poor colour-sense. *Purpureus* is used of many shades of red and brown, being applied to the dawn, to poppies, to a fig and even to the sea. Virgil, like Pliny, says that the narcissus is *purpureus* (*Eclogues* V. 38). This makes the identity of the flower doubtful, especially as it is said to bloom late, and our narcissus is a spring flower.

springs up among shrubs. Without perfume and without the yellow anthers in the centre, it resembles the lily only in colour, being as it were a first attempt by Nature when she was learning to produce lilies. White lilies are propagated by all the means that roses are;^a more than this, by a peculiar tear-like gum of its own, as is also horse-parsley. No plant is more prolific, a single root often sending out fifty bulbs. There is also a red lily that the Greeks call *crinon*,^b some calling its blossom the dog-rose.^c The most esteemed kind grows at Antioch and at Laodicea in Syria, next to them comes that of Phaselis. The fourth place is held by the kind growing in Italy.

XII. There is also a bright-red lily,^d having sometimes a double stem, and differing from other lilies only in having a fleshier root and a larger bulb, and that undivided. It is called the narcissus. Another variety of it has a white flower and a reddish bud. There is this further difference between the ordinary lily and the narcissus, that the leaves of the latter grow straight out of the root. The most popular sort is found on the mountains of Lycia. A third kind has all its characteristics the same as those of the other kinds, except that the cup^e is light green. All the narcissi blossom late, for the flower comes after the rising of Arcturus^f and during the autumnal equinox.

XIII. In lily-culture a strange means of dyeing the blooms has been invented by the wit of man. For in the month of July drying stems of the lily

^a It seems doubtful whether Pliny means here by *calix* the calyx or the corolla. If the former, the lightness of the green is the point of the sentence.

^f Arcturus has its rising according to Pliny (II. § 124) eleven days before the autumnal equinox.

scapi arescentes lili atque suspenduntur in fumo. dein nudantibus se nodulis in faece nigri vini vel Graeci mense Martio macerantur ut colorem percipiant atque ita in scrobiculis seruntur heminis faecis circumfusi. sic fiunt purpurea lilia, mirumque tingui aliquid ut nascatur infectum.

- 27 XIV. Violis honos proximus, earumque plura genera, purpureae, luteae, albae, plantis omnes ut olus satae. ex his vero quae sponte apricis et macris locis proveniunt purpureae latiore folio statim ab radice carnoso exeunt,¹ solaeque Graeco nomine a ceteris discernuntur, appellatae ia et ab his ianthina vestis. e sativis maxima auctoritas luteis. genera autem² Tusculana et quae marina appellatur, folio aliquanto latiore, sed minus odorato.³ in totum vero sine odore minutoque folio Calatiana, munus autumnii, ceterae veris.

- 28 XV. Proxima ei caltha est colore et⁴ amplitudine, vincit numero foliorum marinam quinque⁵ non excedentem. eadem odore superatur, est enim gravis

¹ carnoso exeunt V *Detlefsen* : exeunti (*sic et RE*), carnoso ex *Theophrasto coni. Mayhoff*.

² autem cum multis codd. *Mayhoff* : is E *Detlefsen*.

³ odorato codd., *Detlefsen* : odorata *Mayhoff*.

⁴ colore et *Detlefsen* : et concolori (*cum lacuna*) *Mayhoff*.

⁵ quinque codd. : quina *Mayhoff*.

^a Commentators remark that Pliny is here wholly wrong.

^b The difficulty here is that vegetables of the type designated by *olus* are generally grown from seed. Certain kales, however, grow well from cuttings.

are tied together and hung in the smoke. Then, as the little knots bare themselves, these stems in March are steeped in the lees of dark wine or Greek wine, so that they take on the colour. In this state they are planted in little trenches, with a hemina of lees poured round each. In this way bright-red lilies are produced, and it is wonderful that a plant can be so dyed as to grow a bloom that is also dyed.^a

XIV. Next in esteem comes the violet, of which *Violetts.* there are several kinds, the purple, the yellow, the white, all of them planted as are vegetables, from cuttings.^b Of these kinds however the purple, which comes up wild in sunny, poor soils, springs up with a broader, fleshy leaf, coming straight from the root.^c It is the only one to be distinguished from the others by a Greek name, being called *ion*, from which *ianthine* cloth gets its name. Of the cultivated violets, the most highly esteemed is the yellow variety. The kinds called Tusculan and marine have a slightly broader but less perfumed petal.^d The Calatian variety however is entirely without perfume and has a very small petal;^e it is a gift of autumn, but all other kinds bloom in spring.

XV. Nearest to it comes the *caltha*,^e both in *Caltha.* colour and in size. In the number of the petals it exceeds the marine violet, which never has over five. The same plant is surpassed in scent, that of

^a Mayhoff's reading means much the same, but the grammar is slightly easier: "with a broader leaf, springing up straight out of the root, being fleshy, etc."

^b If *folium* means leaf here, then Mayhoff's *odorata* must be right, as the leaves have no smell.

^c Some say the marsh marigold. Perhaps some variety of pansy.

PLINY : NATURAL HISTORY

calthae.¹ non levior ei quam scopam regiam appellat, quamquam folia eius olent, non flores.

- 29 XVI. Baccar quoque radice tantum odoratae est, a quibusdam nardum rusticum appellatum. unguenta ex ea radice fieri solita apud antiquos Aristophanes priscae comoediae poeta testis est. unde quidam errore falso baccarida² eam appellabant. odor est cinnamomo proximus. gracili solo nec
30 umido provenit. simillimum ei combretum appellatur, foliorum exilitate usque in fila adtenuata, et procerius quam baccar. haec sunt unguenta³ tantum. sed eorum quoque error corrigendus est qui baccar rusticum nardum appellavere. est enim alia herba sic cognominata quam Graeci asaron vocant, cuius speciem figuramque diximus in nardi generibus. quin immo asaron invenio vocitari, quoniam in coronas non addatur.

- 31 XVII. Crocum silvestre optimum. serere in Italia minime expedit, ad scripula usque singula areis decoquentibus. seritur radice bulbo. sativum latius maiusque et nitidius, sed multo lenius, degenerans ubique, nec fecundum etiam Cyrenis, ubi semper

¹ gravis calthae *Detlefsen*: gravis calta *codd.*: gravi caltha *Mayhoff*.

² baccarida *Detlefsen*: barbaricam *cum codd.* *Mayhoff*.

³ haec sunt unguenta *Urlichs, Detlefsen*: haec sutilia *Mayhoff*: haec sunt *codd.*

^a An obscure sentence. To which plant does *eadem* refer, and has *gravis* its usual sense of "rank"?

^b *Folia* means leaves, although the word has just been used of petals.

^c The error apparently is giving a Greek name unnecessarily. The reading *barbaricam* would mean "foreign." Various attempts have been made to identify this plant.

the caltha being strong.^a No less strong is the scent of the plant which they call royal broom, though it is not the flowers that smell, but the leaves.^b

XVI. Baccar (valerian?) too, called by some field *Baccar.* nard, has scent in the root only. That unguents used to be made by the ancients from this root we have a witness in Aristophanes, a poet of the Old Comedy. Whence some used to commit the error of calling it by a Greek name, baccaris.^c The scent is very like that of cinnamon. It grows on a thin dry soil. Very like it is the plant called combretum,^d taller than the baccar, and with leaves so thin that they are mere threads. These are only used as unguents.^e But the mistake of those also must be corrected who have called baccar field nard. For there is another plant with this surname, which the Greeks call asaron, whose shape and appearance we have described among the varieties of nard.^f Moreover, I find that the plant is styled asaron, because it is not used in the making of chaplets.

XVII. Wild saffron is better than any other. To *Saffron.* grow it in Italy is most unprofitable, as a whole bed of saffron yields only a scruple of the essence. It is propagated from a bulb of the root. The cultivated saffron is broader, larger and more handsome, but much less potent; it is degenerating everywhere, and is not prolific even at Cyrene, where grows a saffron whose flowers have always been very famous.

^a This plant cannot be identified with certainty, so that the meaning of *exilitate . . . adtenuata* is very doubtful.

^c Mayhoff's *haec sutilia tantum* would mean: "these are only sewed on chaplets." The fragile leaves might otherwise break.

^f XII. § 47.

PLINY : NATURAL HISTORY

- flores laudatissimi. prima nobilitas Cilicio et ibi in Coryco monte, dein Lyciae monte Olympo, mox
 32 Centuripino Siciliae. aliqui Theraeo secundum locum dedere. adulteratur nihil aequae. probatio sinceri, si inposita manu crepitet veluti fragile; umidum enim, quod evenit adulteratione, silet.¹ altera probatio, si manu relata ² ad ora leniter faciem
 33 oculosque mordeat. est per se genus sativi blandissimum vulgo, cum sit mediocre, *dialeucon* vocant. contra Cyrenaico vitium, quod omni croco nigrius est et celerrime marcescit. optimum ubicumque quod pinguisimum et brevis capilli, pessimum vero quod situm redolet. Mucianus auctor est in Lycia anno septimo aut octavo transferri in locum subactum atque ita degenerans renovari. usus eius in coronis nusquam, herba enim est folio angusto paene in capillamenti modum. sed vino mire congruit,
 34 praecipue dulci, tritum ad theatra replenda. floret vergiliarum occasu paucis diebus, folioque florem

¹ adulteratione, silet. *Sillig*: adulteratione. cedit *Detlefsen*: adulteratione, sentit. *Mayhoff*: adulteratione sedit *codd.*

² relata: praelata RE: prolata *vulg.*

^a Detlefsen's reading: "for adulterated saffron is moist. A further test, etc." Mayhoff's reading: "for saffron that has been adulterated is liable to get moist."

^b With the reading *praelata* or *prolata*: "if you put your hand before your face."

^c Barbarus conjectured, for *mediocre*, *medio candidum*. "White in the middle" is a fair equivalent to *dialeucon*.

^d *Capillamentum*: the hair-like fibre of the leaf.

But the prime favourite is that of Cilicia, and in particular of Mount Corycus, then that of Mount Olympus in Lycia, and then that of Centuripa in Sicily. Some have given second place to the saffron of Thera. Nothing is adulterated as much as saffron. A test of purity is whether under the pressure of the hand it crackles as though brittle; for moist saffron, as saffron is when adulterated, makes no noise.^a Another test is whether it stings slightly the face and eyes if after the above test you bring the hand back ^b to the face. There is a kind of cultivated saffron which is for its own sake very attractive to the general public, though it really is of moderate ^c value, called *dialeucon*. That of Cyrene, on the other hand, has the defect of being darker than any other kind, and loses its quality very rapidly. The best everywhere is that having a very rich nature, and a short pistil; the very worst has an odour of decay. Mucianus is our authority for stating that in Lycia after six or seven years it is transplanted to a well-dug bed; in this way it recovers from its degeneration. It is nowhere used for chaplets, the plant having a leaf that is but little broader than the fibre.^d But with wine, especially with sweet wine, powdered saffron makes a wonderful mixture to spray the theatre. The saffron plant flowers for only a few days at the setting of the Pleiades,^e and pushes off the flower with its leaves.

^a Theophrastus has (*H.P.* VI 6, 10) <μετὰ> Πλειάδα γὰρ ἀνθεῖ καὶ ὀλίγας ἡμέρας εὐθὺς δ' ἅμα τῷ φύλλῳ καὶ τὸ ἀνθος ὠθεῖ. Hort translates "after the rising of the Pleiades" (*i.e.* May). Surely this is wrong; it is the setting of the Pleiades in November to which reference is made. But Pliny mis-translates εὐθὺς δὲ κ.τ.λ., which means that the flower springs up at the same time as the leaf.

PLINY : NATURAL HISTORY

expellit.¹ viret bruma et colligitur. siccatur umbra, melius etiam hiberna. carnosa et illi radix vivaciorque quam ceteris. gaudet calcari et adteri, pereundoque melius provenit. ideo iuxta semitas ac fontes laetissimum. Troianis temporibus iam erat honos ei. hos certe flores Homerus tris laudat, loton, crocum, hyacinthum.

- 35 XVIII. Omnium autem odoramentorum atque adeo herbarum differentia est in colore et odore et suco. odorato sapor raro ulli non amarus, e contrario dulcia raro odorata. itaque et vina mustis odoratiora et silvestria magis omnia sativis. quorundam odor suavior e longinquo, propius admotus
36 hebetatur, ut violae. rosa recens a longinquo olet, sicca propius. omnis autem verno tempore acrior et matutinis. quidquid ad meridianas horas dies vergit, hebetatur. novella quoque vetustis minus odorata. acerrimus tamen odor omnium aetate² media. rosa et crocum odoratiora, cum serenis diebus leguntur, et omnia in calidis quam in frigidis. in Aegypto tamen minime odorati flores, quia nebu-
37 losus et roscidus aer est a multo flumine. quorundam suavitati gravitas inest. quaedam, dum virent, non olent propter umorem nimium, ut buceras,³

¹ folioque florem expellit *codd. plurimi*. Debit scribere *Plinius Theophrastum secutus* folioque simul florem extrudit vel simile aliquid. *Warmington coni.* expellit et colligitur. siccatur umbra, melius etiam hiberna. viret bruma.

² aetate *Urlichs* : aestate, aete, et e *codd.*

³ buceras ex *Theophrasto Urlichs* : buceros *codd.*

^a Inconsistent with Pliny's mistranslation, but not so with Theophrastus. Warmington's conjecture : "pushes off . . . and is gathered. It is dried in the shade ; if in winter's, so much the better. It is green at the winter solstice."

^b *Iliad* XIV. 348.

It is green at the winter solstice, when it is gathered.^a It is dried in the shade; if in winter, so much the better. The root also is fleshy and longer-lived than that of any other plant. Saffron likes to be trodden on and trampled under foot; destroying it makes it grow better. For this reason it is most luxuriant near foot-paths and fountains. Already at the time of the Trojan war it was held in high esteem. Homer, at any rate, praises three flowers—lotus, saffron and hyacinth.^b

XVIII. All spices and also the plants from which they come have different colours, perfumes and juices. It is rare for a thing that smells not to have a bitter taste; on the contrary sweet substances rarely have any smell; and so wines have more smell than must, and all wild plants than the cultivated. The smell of some plants is sweeter at a distance, becoming fainter as the distance is lessened; for instance, that of the violet. A freshly gathered rose smells at a distance, but a faded rose when nearer. All perfume however is stronger in spring, and in the morning; as the day draws near to noon it grows weaker. Young plants also have less perfume than old ones; the strongest perfume however of all plants is given out in middle age. The rose and the saffron have a stronger perfume when they are gathered in fine weather, as have all flowers in warm climates than those in cold. In Egypt however the flowers have very little perfume, the atmosphere being misty and full of dew owing to the wide expanse of river. The scent of some plants is sweet but oppressive. Some, while green, have no smell because of too much moisture, the buceras, for example, which is the same as fenugreek.

*Spices and
perfumes.*

PLINY : NATURAL HISTORY

- datur, unguentis nascens et medicinae. laudatissima in Illyrico, et ibi quoque non in maritimis, sed in silvestribus Drinonis et Naronae, proxima in Macedonia, longissima haec et candicans et exilis. tertium locum habet Africana, amplissima inter omnes gustuque amarissima, Illyrica quoque duorum generum est: raphanitis a similitudine, quae et melior, rhizotomos.¹ subrufa optima, quae sternumenta tractatu movet, caulem habet cubitalem, erectum. floret versicolori specie, sicut arcus caelestis, unde et
- 42 nomen. non inprobatur et Pisidica. effossuri tribus ante mensibus mulsa aqua circumfusa hoc veluti placamento terrae blandiuntur, circumscriptam mucrone gladii orbe triplici cum legerunt, protinus in caelum adtollunt. natura est fervens, tractataque pusulas ambusti modo facit. praecipitur ante omnia ut casti legant. teredines non sicca modo verum et in terra celerrime sentit. optimum antea irinum Leucade et Elide ferebatur,—iampridem enim et seritur—, nunc e Pamphylia, sed Cilicium maxime laudatur atque e septentrionalibus.
- 43 XX. Saliunca folio quidem subbrevis et quod necti non possit radici numerosae cohaeret, herba verius quam flos, densa veluti manu pressa breviterque caespes sui generis. Pannonia hanc gignit et Norici

¹ *Ut Mayhoff distinguo: comma post rhizotomo (quod scribit), post subrufa punctum Deilefsen.*

^a Theophrastus (*H.P.* IX. 7, 4) says this of the Illyrian variety.

for unguents and for medicine. The most highly esteemed is found in Illyria, and even there not in the coastal districts, but in the woody parts near the Drinon and around Naronæ. Next after it comes the Macedonian iris, which is white, thin and very long. Third in estimation comes the African iris, which is the largest of all and the bitterest to the taste. The Illyrian moreover is of two kinds: raphanitis, so called from its likeness to the radish, which is the better kind, and rhizotomos. The best, which is reddish, causes sneezing if handled, and has an upright stem a cubit high. The flower is multi-coloured, like the rainbow; hence the name "iris." The Pisidian variety, too, is by no means despised. Those who are going to dig it up pour hydromel around it three months previously. This is as it were a libation to please the earth. Then they draw three circles round it with the point of a sword, gather it and at once raise it heaven-wards. It is hot by nature, and when handled raises blisters like those of a burn. It is especially enjoined that those who gather it should be chaste. Not only when dried, but also when in the ground, it is very easily subject to worms. Previously the best iris oil used to be brought from Leucas and Elis—for it has been planted there a long time—now the best comes from Pamphylia, but the Cilician too is highly praised, as is also that coming from the northern^a parts.

XX. Celtic nard has leaves that are rather short, and cannot be plaited. It is held together by its many roots, being really a grass rather than a flower, matted as though squeezed by hand; in short, it is a unique kind of turf. Pannonia grows it, and the

*Celtic nard
or valerian.*

PLINY : NATURAL HISTORY

Alpiumque aprica, urbium Eporedia, tantae sua-
 44 vitatis ut metallum esse coeperit. vestibus inter-
 poni eam gratissimum, (XXI.) sicut apud Graecos
 polium, herbam inclutam Musaei et Hesiodi laudibus
 ad omnia utilem praedicantium superque cetera ad
 famam etiam ac dignitates, prorsusque miram, si
 modo, ut tradunt, folia eius mane candida, meridie
 purpurea, sole occidente caerulea aspiciuntur. duo
 genera eius: campestre maius, silvestre quod minus
 est. quidam teutrimon vocant. folia canis hominis
 similia, a radice protinus, numquam palmo altiora.

45 XXII. Et de odoratis floribus satis dictum, in
 quibus unguento vicisse naturam gaudens luxuria
 vestibus quoque provocavit eos flores qui colore
 commendantur. hos animadverto tres esse princi-
 pales, rubentem ut in cocco, qui a rosae nigrantis
 gratia nitido¹ trahitur suspectu et in purpuras Tyrias
 dibaphasque ac Laconicas, amethystinum qui a viola
 et ipse in purpureum quemque ianthinum appel-
 lavimus. genera enim tractamus in species multas
 46 sese spargentia. tertius est qui proprie conchylii
 intellegitur, multis modis: unus in heliotropio et in
 aliquo exilis² plerumque saturator, alius in malva ad
 purpuram inclinans, alius in viola serotina conchy-

¹ rosae nigrantis gratia nitido *Mayhoff*: rosis migrante gratia nonnihil *Dellefsen*: rosis migrante gratia nihil *codd.*

² exilis *Mayhoff*: exilior *vet. Dal.* qui et aliquando pro in aliquo scribit: ex his *codd.*

^a As being, in some way, a great source of income.

^b In our MSS. this sentence is untranslatable. I have translated *Mayhoff*, who gives a text, suspicious indeed, but just capable of being construed. The most difficult word to understand, *suspectu*, is supported by all MSS. The problem is made no easier by the many different shades of colour denoted by *purpura* and *purpureus*.

sunny regions of Noricum and of the Alps, and, of the cities, Eporedia; such is its sweetness that it has begun to be "a gold mine."^a Very pleasant is it for this hard to be sprinkled between clothes, (XXI) as the Greeks do with hulwort, a plant extolled in the praises of Musaeus and Hesiod, who proclaim it to be useful for all things, and especially for winning reputation and honours, in fact as truly marvellous, if only it be true, as they assert, that its leaves are white to the eye in the morning, bright-red at mid-day, and sea-blue at sunset. There are two kinds of it: field hulwort, which is the larger, and wild hulwort, which is smaller. Some call the plant teutrimon. The leaves are like the white hairs of a man, spring up straight from the root, and are never taller than a palm in height.

XXII. Enough has been said about scented flowers. In this sphere luxury, glad to have conquered nature with its unguents, has with its dyed fabrics gone on to challenge those flowers that are commended for their colour. I note that the principal colours are the three following: (1) red, as of the kermes-insect, which, from the loveliness of the dark rose, shades, if you look up at it in a bright light,^b into Tyrian purple, double-dyed purple and Laconian purple; (2) amethyst, which from violet itself passes into purple, and which I have called ianthine. I am discussing general types of colour, which shade off into many kinds. (3) The third belongs properly to the purple of the murex, but includes many kindred shades. One is the colour of the heliotrope, sometimes of a light, though usually of a deeper, tint; another is that of the mallow, shading into a purple; yet a third, seen in the late violet, is the most vivid of

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liorum vegetissimus. paria nunc componuntur et natura atque luxuria depugnant. lutei video honorem antiquissimum, in nuptialibus flammeis totum feminis concessum, et fortassis ideo non numerari inter principales, hoc est communes maribus ac feminis, quoniam societas principatum dedit.

- 47 XXIII. Amaranto non dubie vincimur. est autem spica purpurea verius quam flos aliquis, et ipse sine odore. mirum in eo gaudere decerpi et laetius renasci. provenit Augusto mense, durat in autumnum. Alexandrino palma, qui decerptus adservatur, mireque, postquam defecere cuncti flores, madefactus aqua revivescit et hibernas coronas facit. summa naturae eius in nomine est, appellato, quoniam non marcescat.

- 48 XXIV. In nomine et cyani colos, item holochrysi. omnes autem hi flores non fuere in usu Alexandri Magni aetate, quoniam proximi a morte eius auctores siluere de illis, quo manifestum est postea placuisse. a Graecis tamen repertos quis dubitet non aliter Italia usurpante nomina illorum?

- 49 XXV. At, Hercules, petellio ipsa nomen inposuit, autumnali circaque vepres nascenti et tantum colore commendato, qui est rosae silvestris. folia parva,

^a Or, "reviving fresher than ever," (of the plucked flower).

^b From the Greek *ἀ-* and *μπαίνω*, i.e., "fadeless."

^c Meaning azure, dark blue. Perhaps the cornflower.

^d "All gold." Query: a buttercup?

the murex tints. At the present day Nature and luxury are matched together and are fighting out a duel. I read that yellow was the earliest colour to be highly esteemed, but was granted as an exclusive privilege to women for their bridal veils, and that for this reason perhaps it is not included among the principal colours, that is, those common to men and women, since it is joint use that has given the principal colours their dignity.

XXIII. Without a doubt no effort of ours can *Amaranth.* compete with the amaranth. Yet it is more truly a purple ear than a flower, and is itself without scent. A wonderful thing about it is that it likes to be plucked, growing again more luxuriant^a than ever. It comes out in August, and lasts into the autumn. The prize goes to the amaranth grown at Alexandria, which is gathered for keeping; in a wonderful way, after all flowers are over, the amaranth, if moistened with water, revives and makes winter chaplets. Its special characteristic is implied in its name, given to it because it will not wither.^b

XXIV. The cyanus also declares its colour by its name,^c and so does the holochrysus.^d All these *Cyanus and holochrysus.* flowers however were not in use at the time of Alexander the Great, for writers immediately after his death were silent about them. This silence is clear proof that it was subsequently that they became popular. However, who could doubt that they were discovered by the Greeks, when Italy uses exclusively the Greek names in referring to them?

XXV. But—by heaven!—Italy herself has given *Petellium.* the petellium its name, an autumn flower growing near brambles and esteemed only for its colour, which is that of the wild rose. It has five small

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quina, mirumque in eo flore inflecti cacumen et e nodis intorta¹ folia nasci parvulo calice ac versicolori luteum semen includentia. luteus² et bellio pastillificantibus quinquagenis quinque barbulis. coronant pratenses hi flores; at sine usu plerique,³ et ideo sine nominibus. quin et his ipsis alia alii vocabula inponunt.

50 XXVI. Chrysocome sive chrysitis non habet Latinam appellationem. palmi altitudine est, comantibus fulgore auri corymbis, radice nigra, ex austero dulci, in petrosis opacisque nascens.

51 XXVII. Et fere peractis colorum quoque celeberrimis, transit oratio ad eas coronas quae varietate sola placent. duo earum genera, quando aliae flore constant, aliae folio. florem esse dixerim genistas—namque et his decerpitur luteus—item rhododendron, item zizipha quae Cappadocia vocantur. his odoratus similis qui olearum floribus. in vepribus nascitur cyclaminum, de quo plura alias. flos eius colossinus in coronas admittitur.

¹ e nodis intorta *Mayhoff*: nodis intorto *cum multis codd.* *Detlefsen*: nonnisi retorto *aliquot codd.*: in dorso *coni. Mayhoff*.

² luteus *vulg.*: luteo *codd.* *Fortasse* luteo *propter bellio scriptum est.*

³ coronant pratenses hi flores; at sine usu plerique]. *Codd.* coronantur *aut* coronatur, pratenses *aut* pratensis, hi *aut* hic, flore et, flos ac, flore, flores: pratensis hic flos ac sine usu. plerique et ideo sine nominibus *Detlefsen*. *Ego cum Mayhoff distinguo, et eius coni.* coronant *scribo, sed pro flore ego flores malo.*

petals. A wonderful thing about this flower is that the head bends over, and from the joints grow^a curved petals inclosing yellow seed forming a small corolla of several colours. The bellio too is yellow, with fifty-five lozenge-shaped little beards.^b These meadow flowers are used for chaplets, but most of such flowers are of no use and therefore without names.^c Nay, these very flowers are differently named by different people.

XXVI. The chrysocome (golden rod) or chrysitis *Chrysocome*. has no Latin name. It is a palm in height, flowering in clusters of shining gold, with a harsh, tending-to-sweet root, which is dark, and it grows in rocky, shady places.

XXVII. Having now nearly exhausted the subject *Chaplets*. also of the most popular colours, I ought to pass on to those chaplets that please only because of the variety in their make-up. They are of two kinds: some are made of flowers, others of leaves. Among the flowers I would include greenweed—for the yellow blossom of this too is gathered—also the oleander, and the jujubes of the kind called Capadocian, having a scent like that of olive flowers. Among brambles grows the cyclamen, about which I shall say more elsewhere.^d Its flower, Colossae purple in colour, is used to make up chaplets.

^a I have adopted Mayhoff's reading with no confidence, for it gives a difficult sense, as does Detlefsen's. *Nonnisi retorito* would mean "only when it becomes straight again."

^b This sentence is a real puzzle. We do not know what the *bellio* was, so that the meaning of *pastillicantibus* and *barbulis* (the former ἀπαξ λεγόμενον) is not clear.

^c Detlefsen's reading could be kept with *ut* before *plerique* and a comma at *usu*.

^d See XXV. §§ 114 ff.

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- 52 XXVIII. Folio coronantium milacis et hederæ, corymbique earum optinent principatum, de quibus in fruticum loco abunde diximus. sunt et alia genera nominibus Graecis indicanda, quia nostris maiore ex parte huius nomenclaturæ defuit cura. et pleraque eorum in exteris terris nascuntur, nobis tamen consecranda, quoniam de natura sermo, non de Italia est.
- 53 XXIX. Ergo in coronamenta folio venere melotrum, spiræa, organum, cneorum, quod casiam Hyginus vocat et quod cunilaginem, conyza, melisophyllum quod apiastrum, melilotum quod sertulam Campanam vocamus. est enim in Italiae Campania laudatissima, Graecis in Sunio, mox Chalcidica et Cretica, ubicumque vero asperis et silvestribus nata. coronas ex ea antiquitus factitatas indicio est nomen sertulæ quod occupavit. odor est croco vicinus et flos ipse. Campana¹ placet maxime, foliis brevissimis atque pinguissimis.
- 54 XXX. Folio coronat et trifolium. tria eius genera: minyanthes vocant Graeci, alii asphaltion, maiore folio, quo utuntur coronarii, alterum acuto oxytriphyllon. tertium ex omnibus minutissimum. inter hæc nervosi cauliculi quibusdam ut maratho,
- 55 hippomaratho, myophono. utuntur et ferulis et² corymbis hederæ, et flore purpureo in alio genere

¹ ipse. Campana *Dellefsen*: ipsa cana cum *codd. Mayhoff*.

² et ante in alio *codd.*: ego *transposui*: et hederæ *codd.*: hederæ, et *Mayhoff*.

^a See XVI. §§ 144 ff.

^b With the usual reading: "the melilot itself is white."

XXVIII. As foliage for chaplets smilax, ivy and their clusters provide the favourite material; about these I have spoken at length in my chapters on shrubs.^a There are other kinds also that can be indicated only by their Greek names, because our countrymen for the most part have paid no attention to this nomenclature. Though most of them grow in foreign lands, yet I must discuss them, because my subject is not Italy but Nature.

XXIX. So among the leaves used to make chaplets are found those of melotrum, spiraea, wild marjoram, cneorum, that Hyginus calls cassia, conyza, which he calls cunilago, melissophyllum, known to us as apiastrum, and melilot, which we call Campanian garland. For in Italy the favourite kind grows in Campania, in Greece at Sunium, next in repute the melilot of Chalcidice and Crete, being found however everywhere only in wild, woody districts. That chaplets were in antiquity often made from the melilot is shown by the name *sertula* (garland), which it has adopted as its own. The scent is near to that of saffron, and so is the flower itself. The Campanian^b is very popular indeed, having very short and very fleshy leaves.

XXX. The leaves of trefoil also are used for chaplets. There are three kinds of it: the first is called by some Greeks *minyantes*, by others *asphalton*, having a larger leaf than the other kinds, which the garland makers use. The second kind, *oxytriphylon*, has a pointed leaf. The third is the smallest of them all. Among these some have a sinewy stem, such as *marathum*, *hippomarathum*, *myophonum*. They use also fennel-giant, the clusters of the ivy and a red flower classified in another kind of the

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earum silvestribus rosis simili. sed in his quoque colos tantum delectat, odor autem abest. Et cneori duo genera, nigri atque candidi. hoc et odoratum, ramosa ambo. florent post aequinoctium autumnum. totidem et origani in coronamentis species, alterius enim nullum semen, id cui odor est Creticum vocatur.

- 56 XXXI. Totidem et thymi, candidum ac nigricans. floret autem circa solstitia,¹ cum et apes decerpunt, et augurium mellis est.² proventum enim sperant aparii large florescente eo. laeditur imbribus amittitque florem. semen thymi non potest deprehendi, cum origani perquam minutum non tamen fallat. sed quid interest occultasse id naturam?
- 57 in flore ipso intellegitur satoque eo nascitur. quid non temptavere homines? mellis Attici in toto orbe summa laus existimatur. ergo translatum est ex Attica thymum et vix flore, uti docemur, satum. sed alia ratio naturae obstitit non durante Attico thymo nisi in adflatu maris. erat quidem haec opinio antiqua in omni thymo, ideoque non nasci in Arcadia, cum oleam non putarent gigni nisi intra ccc stadia a mari. thymo quidem nunc etiam lapideos campos in provincia Narbonensi refertos scimus, hoc paene solo reditu, e longinquis regionibus

¹ solstitia omnes codd. et edd. Ego solstitium malim.

² cum . . . est. Ita Dellefsen, etsi non et sed ut habent plures codd. Tum et ut augurium mellis sit Mayhoff.

* The grammar of this sentence can be improved by emendation, but the fact remains that no ivy has a red flower like the wild rose. Has Pliny confused *κισσός* and *κίotos* (rock-rose)?

ivies and resembles the wild rose.^a But in these too it is only the colour that pleases, as they have no perfume. There are also two kinds of *cneorum*, a dark and a white. The latter has perfume, and both are branchy. They blossom after the autumnal equinox. There are also two kinds of wild *marjoram* used for chaplets, one having no seed, and the other, which has perfume, being called *Cretan*.

XXXI. There are two sorts of *thyme*, the pale *Thyme*. and the darkish. Thyme blossoms about the solstices when too the bees sip from it, and a forecast can be made about the honey harvest. For the beekeepers hope for a bumper one if there be an abundance of blossom. Showers damage it and make the blossom fall off. The seed of thyme is imperceptible to sight, and yet that of wild *marjoram*, although very tiny, does not escape our eye. But what does it matter that Nature has hidden it? Reason tells us that the seed is in the flower itself, and if that be sown a plant grows from it. What have men left untried? Attic honey is thought more highly of than any in the whole world. Thyme therefore has been imported from Attica, and grown with difficulty, we are told, from the blossom. But a further hindrance arose through another peculiar characteristic of Attic thyme, which will not survive in the absence of sea breezes. The same view indeed was held of old about all kinds of thyme, and people believed that it was for this reason that it did not grow in Arcadia, while the olive too, they thought, is only found within three hundred stades from the sea. Yet thyme we know today covers even the stony plains of the province of Gallia Narbonensis, being almost the only source of revenue, thousands of sheep being

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pecudum milibus convenientibus ut thymo vescantur.

58 XXXII. Et conyzae duo genera in coronamentis, mas ac femina. differentia in folio : tenuius feminae et constrictius angustiusque, imbricatum maris.¹ mas et ramosior. flos quoque magis splendet eius, serotinus utrique post arcturum. mas odore gravior, femina acutior, et ideo contra bestiarum morsus aptior. folia feminae mellis odorem habent, masculae radix a quibusdam libanotis appellatur, de qua diximus.

59 XXXIII. Etiamnum² folio coronant Iovis flos, amaracum, hemerocalles, habrotonum, Helenium, sisymbrium, serpullum, omnia surculosa rosae modo. colore tantum placet Iovis flos, odor abest, sicut et illi qui Graece phlox vocatur. et ramis autem et folio odorata sunt excepto serpullo. Helenium e lacrimis Helenae dicitur natum, et ideo in Helene insula laudatissimum. est autem frutex humi se spargens dodrantalibus ramulis, serpullo simili folio.

60 XXXIV. Habrotonum odore iucunde gravi floret aestate, aurei³ coloris. vacuum sponte provenit,

¹ maris *om. multi codd.*: imbricatum. mas et ramosior. *Mayhoff.*

² etiamnum *Mayhoff*: et tantum *codd.*

³ *Cum d add.* flos est ante aurei *Mayhoff*, qui vagum pro vacuum *coni.*

^a Our viscous elecampane (*Inula viscosa*).

^b Our fleabane (*Inula pulicaria*).

^c Theophrastus, *H.P.* VI. 2, 6. ὁψιανθεῖ περὶ ἀρκτοῦρον καὶ μετ' ἀρκτοῦρον ἀδρύνει. Arcturus sets 13 May, rises eleven days before the autumn equinox. (See II. § 124 and VIII. § 187.)

^d Theophrastus (*loc. cit.*) says that the female has an ὀσμὴ which is δριμυτέρα (more pungent) δι' ὃ καὶ πρὸς τὰ θηρία χρησίμη. This seems to refer to the smell keeping away

brought there from distant regions to browse upon the thyme.

XXXII. Of conyza also two kinds are used in chaplets, male^a and female.^b They differ in their leaves. That of the female is thinner, more compressed and narrower; the male, which is more branched, has a pantile-shaped leaf. Its blossom too is of a brighter colour; both blossom late, after Arcturus.^c The scent of the male is heavier, of the female, sharper; for which reason the female is more suited to counteract the bites of beasts.^d The leaves of the female have the smell of honey; the root of the male is called by some libanotis, about which I have already spoken.^e *Conyza.*

XXXIII. Chaplets are also made from the leaves of the flower of Jupiter, sweet marjoram, day-lily, southernwood, Helenium, water-mint, wild thyme, all with woody stalks like those of the rose. The flower of Jupiter is pleasing only for its colour, as it has no scent; it is the same with the flower called in Greek phlox. Both the stalks however and the leaves of the plants just mentioned are fragrant, except those of wild thyme. Helenium is said to have sprung up from the tears of Helen, and therefore is very popular in the island of Helene. It is a shrub spreading over the ground with its nine-inch sprigs, the leaf being like wild thyme.

XXXIV. Southernwood, which blossoms in summer, has a flower of a pleasant but heavy scent and of a golden colour. Left alone^f it grows of its own insects, not to the flower (or plant) being good for stings. For the ancient view of sex in plants see p. 66. *Southern-wood.*

^a See XX. § 172.

^f With the reading *vagum*: "it grows straggling, here and there."

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cacumine suo se propagat. seritur autem semine melius quam radice aut surculo, semine quoque non sine negotio; plantaria transferuntur. sic et Adonium, utrumque aestate. alsiosa enim admodum sunt ut sole tamen nimio laedantur. sed ubi convaluere, rutae vice fruticant. habrotono simile odore leucanthemum est, flore albo, foliosum.

- 61 XXXV. Amaracum Diocles medicus et Sicula gens appellavere quod Aegyptus et Syria samp-sucum. seritur utroque genere, et semine et ramo, vivacius supra dictis et odore mollius. copiosum amaraco aequae quam habrotono semen, sed habrotono radix una est alte descendens, ceteris in summa terra leviter haerens.¹ reliquorum satio autumnio fere incipiente nec non et vere quibusdam locis, umbraque² gaudent et aqua ac fimo.

- 62 XXXVI. Nyctegreton inter pauca miratus est Democritus, coloris hysgini, folio spiniae, nec a terra se adtollentem. praecipuam in Gedrosia narrat

¹ haerens *multi codd. et Mayhoff, qui haerent malit: haerentibus Dellefsen.*

² umbraque *Mayhoff: quae umbra codd. Fortasse omnia umbra. Theophrastus H.P. VI. 7, 6 πάντα φιλόσκια καὶ φώλυδρα κ.τ.λ.*

^a Theophrastus (*H.P. VI. 7,3*) says *προμοσχευόμενον ἐν ὀστράκοις ὥστερ οἱ Ἀδωνίδος κῆποι τοῦ θέρους*. Pliny seems to have thought that this reference to the flower-boxes used in the festival of Adonis was a reference to a flower called adonium.

^b We expect Pliny to contrast southernwood with sweet marjoram, but instead of this comes a reference to the plants of section 59. Pliny, without thinking of the sequence of his thought, is translating Theophrastus, *H.P. VI. 7, 4 ἔστι γὰρ ὥστερ μονόρριζον - - - - ὁ δ' ἀμάρακος καὶ ὁ ἐρφυλλος - - - καὶ*

accord, reproducing itself by layers from the head. It is however grown from seed better than from the root or from slips; from seed too not without trouble. The seedlings are transplanted—as is the *adonium*^a—both in summer. For they are very chilly plants, yet liable to be injured by too much sun. But when they have grown strong, they sprout after the manner of rue. Like southernwood in scent is *leucanthemum*, with a white flower and abundant leaves.

XXXV. Diocles the physician and the people of Sicily have called sweet marjoram the plant known in Egypt as *sampsucum*. It is reproduced by the two methods, from seed and from branch-cuttings, being longer-lived than the plants mentioned above and of a milder scent. Sweet marjoram produces as copious a quantity of seed as does southernwood, but the latter has one root penetrating deep into the earth, while the roots of the others^b cling lightly to the surface of the ground. The planting of the rest takes place generally in the beginning of autumn, and also, in some places, in spring, and they delight in shade, water and dung.^c

XXXVI. *Nyctegreton*^d was one of a few plants chosen for special admiration by Democritus; it is of a dark-red colour, with a leaf like a thorn, and not rising high from the ground; a special kind grows in Gedrosia. He reports that it is pulled up by the

τὸ ἐλένιον ἐπιπολαίους καὶ πολυσχιδεῖς καὶ ταρράδεις. So without doubt *ceteris* must stand. Detlefsen's *haerentibus*, referring to the other roots of southernwood, is based on the words of Theophrastus after *μονόρριζον*, namely, *τὰς δ' ἄλλας ἀφίσχιν ἀπ' αὐτῆς*.

^c Theophrastus, *H.P.* VI. 7, 6: *ἅπαντα φιλόσκια καὶ φλυδρα καὶ φιλόκοπρα μάλιστα* suggests *omnia umbra gaudent*, etc.

^d "Night-watcher."

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erui post aequinoctium vernum radicitus siccarique ad lunam xxx diebus, ita lucere noctibus. Magos Parthorumque reges hac herba uti ad vota suscipienda. eandem vocari chenamychen, quoniam anseres a primo conspectu eius expavescant, ab aliis nyctalopa, quoniam e longinquo noctibus fulgeat.

63 XXXVII. Melilotos ubique nascitur, laudatissima tamen in Attica, ubicumque vero recens nec candicans et croco quam simillima, quamquam in Italia odoratior candida.

64 XXXVIII. Florum prima ver nuntiantium¹ viola alba—tepidioribus vero locis etiam hieme emicat—post ea quae ion appellatur et purpurea, proxime flammeum, quod phlox vocatur, silvestre dumtaxat. cyclaminum bis anno, vere et autumno. aestates hiemesque fugit. seriores supra dictis aliquanto narcissus et lilium trans maria, in Italia quidem, ut diximus, post rosam. verum in Graecia tardius etiamnum anemone. est autem haec silvestrium bulborum flos, alia quam quae dicetur in medicis.

65 sequitur oenanthe ac melanium et ex silvestribus heliochrysos, deinde alterum genus anemones quae limonia vocatur, post hanc gladiolus comitatus

¹ nuntiantium *cum vulg.* *Detlefsen*: nuntianti plerique *codd.*: nuntiat *Mayhoff*.

^a Because it made geese (*χῆνες*) run in panic into a corner (*μύχος*).

^b See § 53.

^c See § 27.

^d See § 59.

^e See XXV. § 67.

^f See § 22.

^g See § 164.

^h See § 167.

ⁱ "Black violet." See Theophrastus *H.P.* VI. 6, 3 and 8, 1 and 2. Our sweet violet.

^j "Little sword." See § 107.

roots after the spring equinox and dried in the moonlight for thirty days; that after this it glows at night, and that the Magi and the kings of Parthia use the plant to make their vows. It is also called, he says, *chenamyche*,^a because geese are panic-stricken at the first sight of it, and by others *nyctalops*, because it gleams a long distance by night.

XXXVII. *Melilot*^b grows everywhere, the most popular kind, however, in Attica; everywhere moreover the freshly gathered is preferred, and not the white variety but that most resembling saffron, and that though in Italy the white is the more fragrant.

XXXVIII. The first flower to herald the approach of spring is the white violet,^c which moreover in the warmer spots peeps out even in winter. Afterwards comes the violet which is called *ion*, and the mauve one, followed closely by the flame-coloured flower called *phlox*,^d but only the wild variety. The *cyclamen*^e blossoms twice in the year, in spring and in autumn; it shuns summer and winter. A little later than those mentioned above come, overseas, the *narcissus* and the *lily*, which in Italy, as we have said,^f is after the rose. But in Greece comes later still the *anemone*. This however is a flower of the wild bulbs, and different from the plant to be spoken of among the medicinal herbs.^g It is followed by the *oenanthe*,^h the *melanium*ⁱ and the wild *heliochrysus*, then the other kind of *anemone*, which is called the meadow *anemone*, after which comes the *gladiolus*,^j together with the *hyacinth*.^k

* Authorities differ about the plants which the ancients included under this name. *Delphinium*, *gladiolus* and *martagon-lily* have some varieties which may possibly be referred to by the name *hyacinthus*.

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hyacintho. novissima rosa, eademque prima deficit excepta sativa, e ceteris hyacinthus maxime durat et viola alba et oenanthe, sed haec ita, si devolsa crebro prohibeatur in semen ire. nascitur¹ in locis tepidis. odor idem ei qui germinantibus uvis, atque inde nomen. hyacinthum comitatur fabula duplex, luctum praeferens eius quem Apollo dilexerat, aut ex Aiakis cruore editi, ita discurrentibus venis ut Graecarum litterarum figura AI legatur inscriptum. heliochrysus florem habet auro similem, folium tenue, cauliculum quoque gracilem sed durum. hoc coronari² se Magi, si et unguenta sumantur ex auro quod apyron vocant, ad gratiam quoque vitae gloriamque pertinere arbitrantur. et verni quidem flores hi sunt.

67 XXXIX. Succedunt illis aestivi, lychnis et Iovis flos et alterum genus lilii, item iphyon³ et amaracus quem Phrygium cognominant. sed maxime spectabilis pothos. duo genera huius: unum cui flos hyacinthi est, alter candidus qui fere nascitur tumulis,⁴ quoniam fortius durat. et iris aestate floret. abeunt et hi marcescuntque. alii rursus subeunt autumnis: tertium genus lilii, et crocum et orsini utraque genera, unum hebes, alterum odo-

¹ semen ire. nascitur *Mayhoff*: in semine renasci, in *Delefsen*: semine aut seminibus renascitur *codd.*

² coronari *Urlichs et Delefsen*: coronare cum plerisque *codd.* *Mayhoff.*

³ iphyon *Sillig, Delefsen*: tiphyon cum nonnullis *codd.* *Mayhoff.*

⁴ tumulis *Ianus*: in tumulis *codd.*

^a Oenanthe means "wine flower." ^b "Lamp flower."

^c Or tiphyon, probably a kind of narcissus.

^d "Yearning," "desire."

^e Or, reading in *tumulis*: "grown on graves because it is hardy."

The last to bloom is the rose, which is also the first to fade, except the cultivated kind. Of the others, the hyacinth lasts longest in flower with the white violet and the oenanthe, but the last only if by repeated plucking it is prevented from running to seed. It grows in warm districts, and has the same scent as forming grapes: hence the name.^a The hyacinth is associated with two forms of a legend; one that it displays the mourning for that youth whom Apollo had loved, and the other that it sprang from the shed blood of Ajax, the veins of the flower being so arranged that on it is to be read AI inscribed in the form of Greek letters. Heliochrysus has a flower like gold, a slight leaf and also a slender but hard stem. The Magi think that to wear a chaplet of this plant, if unguents too be taken from a box of the gold called apyron, leads also to popularity and glory in life. These then are the flowers of spring.

XXXIX. After them come the summer flowers, lychnis,^b Jupiter's flower, a second kind of lily, the iphyon^c also and the amaracus surnamed Phrygian. But the most beautiful to the eye is the pothos.^d There are two kinds of it: one having the flower of the hyacinth, the other being white and commonly grown for graves, because it lasts well without fading.^e The iris also blooms in summer. But these too wither and pass away, to be followed again by others in autumn—a third kind of lily, the saffron crocus and the two kinds of orsinus,^f one without and one with perfume, all of them peeping

^f An unknown plant. Jan thinks that Pliny has mis-translated Theophrastus, *H.P.* VI. 7, among other mistakes, taking the *ορεινός* of the latter to be *ορεινός*.

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68 raturum, primis omnia imbribus emicantia. coronarii quidem et spinæ flore utuntur, quippe cum spinæ albae cauliculi inter oblectamenta quoque gulæ condiantur. illic est trans maria ordo florum. in Italia violis succedit rosa, huic intervenit lilium, rosam cyanus excipit, cyanum amarantus. nam vicapervica semper viret in modum linia¹ foliis geniculatim circumdata, topiaria herba, inopiam tamen florum aliquando supplet. hæc a Graecis chamaedaphne vocatur.

69 XL. Vita longissima violæ albae trimatu. ab eo tempore degenerat. rosa et quinquennium perfert non recisa nec adusta. illo enim modo iuvenescit. diximus et terram referre plurimum. nam in Aegypto sine odore hæc omnia, tantumque myrtis odor præcipuus; alicubi² etiam binis mensibus antecedit germinatio omnium. rosaria a favonio fossa oportet esse iterumque solstitio, et id agendum ut intra id tempus purgata ac pura sint.

¹ linia cum E vulg., Deilefsen, Mayhoff: in aliis codd. liliae aut lilii legitur. Ulrichs laureae coni., milii Mayhoff.

² alicubi vulg.: atqui Deilefsen: alioqui Mayhoff: aliqui aut aliquis codd. Theophrastus H.P. VI. 8, 5: προτερεῖν δὲ φασὶ τῶν ἐνταῦθα (sc. ἐν Αἰγύπτῳ) καὶ ῥόδα καὶ . . . διαμένειν πλείω τῶν παρ' ἡμῶν κ.τ.λ. Num Plinius pro τῶν παρ' ἡμῶν Italicis scripsit? Fortasse alibi.

^a See § 48.

^b Most authorities take this to be our periwinkle.

^c I take *linia* to refer to the form of the *formido*, a line with feathers at intervals to scare away birds. An odd comparison, and the *laureae* (taken closely with *semper viret*—cp. the Greek name *chamaedaphne*) of Ulrichs is attractive.

^d "Ground-laurel."

out at the first showers. Garland-makers actually use the blossom even of the thorn, while the young stalks of the white thorn are preserved to be a delicacy of the table. This is the succession of flowers overseas. In Italy violets are followed by the rose, which is still in blossom when the lily appears. The rose is succeeded by the cyanus,^a the cyanus by the amaranth. But the vicapervica ^b is an evergreen, surrounded by leaves at the joints after the manner of the scarecrow cord,^c a plant for the fancy garden, but at times filling the gap when other flowers fail. This plant is called chamaedaphne ^d by the Greeks.

XL. At the most the life of the white violet is three years. After that time it degenerates. The rose lasts even for five years if it is neither pruned down nor burned; for by these means it renews its youth. We have also said ^e that the soil makes a great difference. For in Egypt all these ^f flowers are without perfume, and the myrtle only has a remarkable one. In some places ^g the buds of all form as much as two months before they do so elsewhere. Rose beds ought to be dug over immediately after the west wind ^h begins and again at the solstice, and great care should be taken that in the interval the ground be kept clean and sweet.

^e See § 19.

^f The words of Theophrastus (*H.P.* VI. 8, 5) corresponding to *haec omnia*, etc. are: τὰ μὲν ἄλλα πάντ' ἄσσμα καὶ ἀνθη καὶ ἀρώματα, αἱ δὲ μυρρίναι θαυμασταὶ τῇ εὐοσμῷ. *Haec omnia* as a translation of τὰ μὲν ἄλλα πάντα is misleading, if not inaccurate.

^g With Detlefsen's reading: "and yet the buds, etc." With Mayhoff's: "elsewhere." With my suggestion, "in Italy."

^h That is, Feb. 8; see II. 122.

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- 70 XLI. Verum hortis coronamentisque maxime alvaria et apes conveniunt, res praecipui quaestus compendiique cum favet. harum ergo causa oportet serere thymum, apiastrum, rosam, violas, lilium, cytisum, fabam, erviliam, cunilam, papaver, conyzam, casiam, melilotum, melissophyllum, cerinthen.~ ea est autem folio candido, incurvo, cubitalis, capite
- 71 concavo mellis sucum habente. horum floris avidissimae sunt, atque etiam sinapis, quod miremur, cum olivae florem ab his non attingi constet; ideo hanc arborem procul esse melius sit, cum aliquas quam proxime seri conveniat quae et evolantium examina invitent nec longius abire patiantur.
- 72 XLII. Cornum quoque arborem caveri oporteat.¹ flore eius degustato alvo cita moriuntur. remedium sorba contusa e melle praebere his vel urinam hominis vel boum aut grana punici mali Amineo vino conspersa. at genistas circumseri alvariis gratissimum.
- 73 XLIII. Mirum est dignumque memoratu de alimentis quod conperi. Hostilia vicus adluitur Pado. huius inquilini pabulo circa deficiente inponunt navibus alvos noctibusque quina milia passuum contrario amne subvehunt. egressae luce apes pastaeque ad naves cotidie remeant mutantes locum, donec pondere ipso pressis navibus plenae

¹ oporteat cum fere omnibus codd. Mayhoff: oportet d vulg., Dellefsen.

XLI. But gardens and chaplet flowers are closely *Bees.* associated with apiaries and bees, bee-culture being a source of very great profit at slight expense, when circumstances are favourable. Therefore, for the sake of the bees you ought to plant thyme, apias-trum, roses, violets, lilies, tree-medick, beans, bitter vetches, cunila, poppies, conyza, casia, melilot, melissophyllum, cerintha. The last has a white leaf curving inwards, and is a cubit high, with a hollow head containing the honey juice. Of the blossom of these plants bees are very fond, as they are also of mustard, a strange thing to those familiar with the well-known fact that the blossom of the olive is not touched by them. For this reason it is better to keep olive trees away from them, while some trees it would be wise to plant as near the hives as possible, both to attract the swarms as they fly out, and to prevent their straying to too great a distance.

XLII. You must beware also of the cornel tree. If bees taste its blossom they die of diarrhoea. A remedy is to administer crushed sorb apples in honey to those affected, or human urine or that of oxen, or pomegranate seeds sprinkled with Aminean wine. But what they like most is to have greenweed planted round their hives.

XLIII. Wonderful and worthy of record is what I *Honey.* have discovered about their food. Hostilia is a village on the bank of the Padus. When bee-fodder fails in the neighbourhood the natives place the hives on boats and carry them five miles upstream by night. At dawn the bees come out and feed, returning every day to the boats, which change their position until, when they have sunk low in the water under the mere weight, it is understood that the

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alvi intellegantur revectisque eximantur mella. et
 74 in Hispania mulis provehunt simili de causa, (XLIV.)
 tantumque pabulum refert ut mella quoque venenata
 fiant. Heracliae in Ponto quibusdam annis per-
 niciosissima existunt ab iisdem apibus facta. nec
 dixere auctores e quibus floribus ea fierent, nos
 trademus quae conperimus. herba est ab exitio et
 iumentorum quidem, sed praecipue caprarum,
 appellata aegolethron. huius flore concipiunt nox-
 ium virus aquoso vere marcescentis. ita fit ut non
 75 omnibus annis sentiatur malum. venenati signa
 sunt quod omnino non densatur, quod color magis
 rutilus est, odor alienus sternumenta protinus
 movens, quod ponderosius innoxio. qui edere
 abiciunt se humi refrigerationem quaerentes, nam
 76 et sudore diffuunt. remedia sunt multa, quae suis
 locis dicemus. sed quoniam statim repraesentari
 aliqua in tantis insidiis oportet, mulsum vetus e
 melle optumo et ruta, salsamenta etiam, si rei-
 ciantur sumpta crebro. certumque est id malum
 per excrementa ad canes etiam pervenire simili-
 terque torqueri eos. mulsum tamen ex eo inve-
 teratum innocuum esse constat, et feminarum
 cutem nullo melius emendari cum costo, suggillata
 cum aloe.

^a "Goat-destroyer."

^b XXIX. § 97.

hives are full, and then they are taken back and the honey is extracted. In Spain too for a like reason they carry the hives about on mules. (XLIV.) The food of bees is of so much importance that even their honey may become poisonous. At Heraclia in Pontus the honey turns out in certain years very deadly, and that from the same bees. As the authorities have not said from what flowers this honey is extracted, I will myself put on record what I have ascertained. There is a plant which, from its deadly effect even on cattle, more particularly upon goats, is called *aegolethron*.^a From the blossom of this, when it withers in a rainy spring, bees take in a noxious poison. Thus it happens that it is not in all years that the danger is encountered. The signs of poisonous honey are that it does not thicken at all, its colour inclines to red, its smell is strange and at once causes sneezing, and it is heavier than harmless honey. Cattle which have eaten it throw themselves on the ground, seeking to cool themselves, for they actually drip with sweat. Remedies are many, and I will give them in their proper place.^b But some should be given at once, as the danger is so insidious: there is old honey wine, made from the finest honey, with rue, and also salted fish, these to be repeated several times should the stomach reject them. It is an established fact that this poison, through the excreta, affects even dogs, which suffer similar torture. It is a fact, however, that honey wine made with poisonous honey is, after maturing, quite harmless, and that there is nothing better than this honey, mixed with costum, for improving the skin of women, or, mixed with aloes, for the treatment of bruises.

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- 77 XLV. Aliud genus in eodem Ponti situ, gente Sannorum, mellis quod ab insania quam gignit maenomenon vocant. id existimatur contrahi flore rhododendri quo scatent silvae. gensque ea, cum ceram in tributa Romanis praestet, mel, quoniam exitiale est, non vendit. et in Perside et in Mauretaniae Caesariensis Gaetulia contermina Massaesyliis venenati favi gignuntur, quidamque a parte, quo nihil esse fallacius potest, nisi quod livore depre-
- 78 henduntur. quid sibi voluisse naturam his arbitremur insidiis, ut ab iisdem apibus nec omnibus annis fierent aut non totis favis? parum enim erat genuisse rem in qua venenum facillime daretur? etiamne hoc ipsa in melle tot animalibus dedit? quid sibi voluit nisi ut cautiorem minusque avidum faceret hominem? non enim et ipsis apibus iam cuspides dederat et quidem venenatas, remedio adversus has utique non differendo? ergo malvae suco aut foliorum hederæ perungui salutare est vel percussos ea bibere. mirum tamen est venena portantes ore fingentesque ipsas non mori, nisi quod illa domina rerum omnium hanc dedit repugnantiam apibus sicut contra serpentes Psyllis Marsisque inter homines.

“Mad” or “raving.”

XLV. There is another kind of honey, found in the same district of Pontus among the people called Sanni, which from the madness it produces is called *maenomenon*.^a This poison is supposed to be extracted from the flowers of the oleanders which abound in the woods. Though these people supply the Romans with wax by way of tribute, the honey, because of its deadly nature, they do not sell. In Persis, too, and in Gaetulia of Mauretania Caesariensis, bordering on the Massaesyli, are found poisoned honeycombs, sometimes only in part such, a more deceptive limitation than anything else could be, were it not that the livid colour makes detection easy. What are we to think that Nature meant by these traps; that they should not occur every year, and not in the whole of the comb, and yet be due to the same bees? Was it not enough to have produced a substance in which it was very easy to administer poison? Did Nature also administer it herself in the honey to so many living creatures? What did she mean, except to make man more careful and less greedy? For had she not already bestowed upon the bees themselves a spear, and that a poisoned one, so that a cure for this poison must be given most assuredly without delay? Accordingly, it is healing to apply to the sting the juice of the mallow or of ivy leaves, or for the stung persons to take these in drink. Yet it is wonderful that the bees, carrying poison in their mouths and working it, do not themselves die, unless it be that the great Mistress of all things has given bees this immunity, as she has given immunity against snake-bite to the Psylli and to the Marsi among men.

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- 79 XLVI. Aliud in Creta miraculum mellis: mons est Carina ^{viii} passuum ambitu, intra quod spatium muscae non reperiuntur, natumque ibi mel nusquam attingunt. hoc experimento singulare medicamentis eligitur.
- 80 XLVII. Alvaria orientem aequinoctialem spectare convenit. aquilonem evitent, nec favonium minus. alvus optima e cortice, secunda ferula, tertia vimine; multi et e speculari lapide fecere, ut operantes intus spectarent. circumlini alvos fimo bubulo utilissimum, operculum a tergo esse ambulatorium, ut proferatur intus, si magna sit alvus aut sterilis operatio, ne desperatione curam abiciant, id paulatim reduci fallente operis incremento. alvos hieme stramento operiri, crebro suffiri, maxime fimo
- 81 bubulo. cognatum hoc iis innascentes bestiolas necat, araneos, papiliones, teredines, apesque ipsas excitat. et araneorum quidem exitium facilius est. papilio, pestis maior, lucernis tollitur vere, cum maturescat malva, noctu interlunio caelo sereno accensis ante alvos. in eam flammam sese ingerunt.
- 82 XLVIII. Si cibus sentiatur deesse apibus, uvas passas siccasve ficos tutas ad fores earum posuisse conveniat, item laneas¹ tractas madentes passo aut defruto aut aqua mulsa, gallinarum etiam nudas²

¹ laneas *Detlefsen*: lanas *codd.* et *Mayhoff*, qui etiam lanae *coni.*

² nudas *plurimi codd.*, *Sillig*, *Detlefsen*: crudas *vulg.*, *Mayhoff*.

^a Or, "wonder connected with honey."

^b The word "akin" probably refers to the legend that bees can be bred from the putrified entrails of an ox. See *Virgil Georgics* IV. 554-558.

XLVI. In Crete is found another wonderful honey.^a There Mount Carina has a circumference of nine miles, within which no flies are found, and nowhere do flies touch the honey coming from that place. By this test is selected a honey specially suited for medicines.

XLVII. It is well for the apiaries to look due east, *Bee-keeping.* and to avoid the north wind as well as the west wind. The best hive is made of bark; the next best material is fennel-giant, and the third is osier. Many too have made hives of transparent stone, so that they might look on the bees working inside. It is very useful for the hives to be daubed all over with cow dung, and for a movable cover to be made at the back, that it may be brought forward if the hive be large or the working unproductive, lest the bees lose hope and cease to care; this cover should be gradually slid back so that they do not see how their work has grown. In winter cover the hives with straw, and fumigate them repeatedly, especially with cow dung. This being akin^b to the bees kills the insects that breed in the hive—spiders, moths and wood worms, besides stimulating the bees themselves. To exterminate the spiders indeed is fairly easy. The moths, a greater plague, are destroyed in the spring by lamps, which are lighted before the hives when the mallow begins to ripen, on a night of the new moon when the sky is clear. Into the flame of these the moths fling themselves.

XLVIII. If it is felt that the bees are in need of food, it would be well to place at the door raisins or crushed dried figs, as well as carded wool soaked in raisin wine, boiled-down must or hydromel, as well

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carnes. quibusdam et aestatibus iidem cibi praestandi, cum siccitas continua florum alimentum abstulit. alvorum, cum mel eximatur, inlini oportet exitus melissophyllo aut genista tritis, aut medias alba vite praecingi, ne apes diffugiant. vasa mel-laria aut favos lavari aqua praecipiunt, hac decocta fieri saluberrimum acetum.

- 83 XLIX. Cera fit expressis favis, sed ante purificatis aqua ac triduo in tenebris siccatis, quarto die liquatis igni in novo fictili, aqua favos tegente, tunc sporta colatis. rursus in eadem olla coquitur cera cum eadem aqua excipiturque alia frigida, vasis melle circumlitis. optima quae Punica vocatur, proxima quam maxime fulva odorisque mellei, pura, natione autem Pontica, quod constare equidem miror, inter venenata mella, dein Cretica, plurimum enim ex propoli habet, de qua diximus in natura apium. post has Corsica, quoniam ex buxo fit, habere quandam vim medicaminis putatur. Punica fit hoc
84 modo: ventilatur sub diu saepius cera fulva, dein fervet in aqua marina ex alto petita addito nitro. inde lingulis hauriunt florem, id est candidissima

^a Apparently "plucked," or "stripped of feathers." With the reading *crudas*, "raw."

^b XI. § 16.

^c Or: "from the deep sea."

as the bare^a flesh of poultry. In some summers also, when continued drought has deprived the bees of their food from flowers, the same kinds of food must be supplied to them. When the honey is taken out, the exit of the hive should be smeared with crushed melissophyllum or greenweed, or the middle should be lined with white vine, to prevent the bees from flying away. Honey pots and combs are recommended to be washed with water; this when boiled down is said to make a very wholesome vinegar.

XLIX. Wax is made after the honey has been *Bees-wax.* extracted from the combs, but these must be first cleaned with water and dried for three days in the dark; then on the fourth day they are melted in a new earthen vessel on the fire, with just enough water to cover them, and then strained in a wicker basket. The wax is boiled again with the same water in the same pot, and poured into other water, this to be cold, contained in vessels smeared all round inside with honey. The best is that called Punic wax; the next best is very yellow indeed, with the smell of honey, pure, but produced in Pontus, the region of the poisonous honies, which makes me surprised at its established reputation; next is Cretan wax, consisting in very great part of bee-glue, about which we have spoken in treating of the nature of bees.^b After these comes Corsican wax, which as it is made from honey got by bees from box, is supposed to have a certain medicinal quality. Punic wax is prepared in the following way. Yellow wax is exposed to the wind several times in the open, then it is heated in water taken from the open sea,^c to which soda has been added. Then they collect with spoons the "flower," that

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- quaeque, transfunduntque in vas quod exiguum frigidae habeat, et rursus marina decocunt separatim, dein vas ipsum aqua¹ refrigerant. et cum hoc ter fecere, iuncea crate sub diu siccant sole lunaque. haec enim candorem facit, sol siccant, et ne liquefaciat, protegunt tenui linteo. candidissima vero fit post insolationem etiamnum recocta. Punica medicinis
- 85 utilisima. nigrescit cera addito chartarum cinere, sicut anchusa admixta rubet, variosque in colores pigmentis trahitur ad reddendas similitudines et innumeros mortalium usus parietumque etiam et armorum tutelam. cetera de melle apibusque in natura earum dicta sunt. et hortorum quidem omnis fere peracta ratio est.
- 86 L. Secuntur herbae sponte nascentes quibus pleeraeque gentium utuntur in cibis maximeque Aegyptus, frugum quidem fertilissima, sed ut prope sola iis carere possit. tanta est ciborum ex herbis abundantia. in Italia paucissimas novimus, fraga, tamnum, ruscum, batim marinam, batim hortensiam, quam² aliqui asparagum Gallicum vocant, praeter has pastinacam pratensem, lupum salictarium, eaque verius oblectamenta quam cibos.
- 87 LI. In Aegypto nobilissima est colocasia, quam cyamon aliqui vocant. hanc e Nilo metunt, caule,

¹ aqua *Ianus* : aut aquam *Mayhoff* : antequam *codd.*

² quam *Detlefsen* : quas *Mayhoff*.

^a *I.e.*, only the "flower."

^b *Mayhoff's* conjecture : "the pot itself or the water."

^c Book XI. §§ 11 ff.

^d *Caulis* and *thyrsus*, sometimes identical in meaning, are here distinguished, *caulis* being pure stalk and *thyrsus* including at least some of the leaves.

is, all the whitest parts, and pour into a vessel containing a little cold water. Then it is boiled again by itself^a in sea-water, after which they cool the vessel itself with water.^b When they have done this three times, they dry the wax in the open, by sunlight and by moonlight, on a mat of rushes. For the moon makes it white while the sun dries it; to prevent the sun from melting it, they cover it with a piece of thin linen cloth. The greatest whiteness, however, is obtained if after the exposure to the sun the wax is once more boiled again. Punic wax is the most useful for medicines. Wax becomes dark with the addition of paper ash, and red with an admixture of alkanet; by paints it is made to assume various colours for forming likenesses, for the innumerable uses of men, and even for the protection of walls and of weapons. The other details about honey and about bees have been described in my treatment of the nature of the bee.^c Of gardens indeed practically the whole account has been given.

L. There follow the plants that grow wild. Most *wild plants* peoples use these for food, especially the people of Egypt, a land very fruitful in crops, yet about the only one that could manage without them, so great an abundance of food does it get from plants. In Italy however we know few such, strawberries, wild vine, butcher's broom, samphire, and garden fennel, which some call Gallic asparagus; besides these there are meadow parsnip and willow wolf, though these are delicacies rather than foods.

LI. In Egypt the most famous plant of this kind *Culcas*. is the colocasia, called by some cyamos; they gather it out of the Nile. The stalk of the stem^d when

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cum coctus est, araneoso in mandendo, thyrsos autem qui inter folia emicat spectabili, foliis latissimis, etiam si arboreis conparentur, ad similitudinem eorum quae personata in nostris amnibus vocamus, adeoque Nili sui dotibus gaudent ut inplexis colocasiae foliis in variam speciem vasorum potare gratissimum habeant. seritur iam haec in Italia.

- 88 LII. In Aegypto proxima auctoritas cichorio est, quod diximus intubum erraticum. nascitur post vergilias, floret particulatim. radix ei lenta, quare etiam ad vincula utuntur illa. anthalium longius¹ a flumine nascitur mespili magnitudine et rotunditate, sine nucleo, sine cortice, folio cyperi. mandunt igni paratum.² mandunt et oetum, cui pauca folia
89 minimaque, verum radix magna. arachidne quidem et aracos, cum habeant radices ramosas ac multiplices, nec folium nec herbam ullam aut quicquam aliud supra terram habent. reliqua vulgarium in cibis apud eos herbarum nomina: chondrylla, hypochoeris, caucalis, enthriscum, scandix,³ quae ab aliis tragopogon vocatur, foliis croco simillimis, parthenium, trychnum, corchorus et ab aequinoctio nascentes aphace, achynops. epipetron vocant quae numquam floret. at e contrario aphace subinde marcescente flore emittit alium tota hieme totoque vere usque in aestatem.

¹ longius: fortasse non longius (ὅν πόρρω τοῦ ποταμοῦ Theophrastus H.P. IV. 8, 12).

² igni paratum: ἔβουσιν ἐν βύρῳ τῇ ἀπὸ τῶν κριθῶν Theophrastus, unde in bryto paratum coni. Sillig.

³ Post scandix add. come Sillig et Mayhoff ex Theophrasto.

“Perhaps (Forcellini s.v. *persolata* and *personata*) “large enough to serve as a bonnet,” but the word should mean “masked,” not “serving as a mask.”

boiled and chewed breaks up into spidery threads, but the stem itself is handsome, jutting out from leaves which, even when compared with those of trees, are very broad, similar to the leaves called *personata* ^a which are found in Italian rivers. So much do the people of the Nile appreciate the bounty of their river that they plait colocasia leaves into vessels of various shapes, which they consider make attractive goblets. The colocasia is now grown in Italy.

LII. In Egypt next in esteem after colocasia *Chicory*, comes chicory, which I have spoken of as wild endive. It appears after the Pleiades ^b and its parts bloom in succession. It has a tough root, so that it is even used to make binding ropes. Farther from the river grows anthalum, of the size and roundness of a medlar, without kernel or peel, and with the leaf of the cyperus.^c They roast it at a fire and eat it. They eat too oetum, which has few and very small leaves, but a large root. Arachidne indeed and aracos, though they have manifold, branchy roots, have neither leaf nor any green, nor anything else at all above ground. The rest of the plants commonly included by the Egyptians among their foods are thus named:—chondrylla, hypochoeris, caucalis, enthriscum, scandix, called by some tragopogon,^d which has leaves very like those of saffron, parthenium, trychnum, corchorus, aphace and achynops, the last two appearing just after the equinox. There is a plant called epipetron which never blossoms. But on the other hand aphace, as its flowers fade, puts forth continually others all the winter and all the spring, right on into summer.

^b See p. xxii.^c Sweet rush.^d Goat's beard.

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90 LIII. Multas praeterea ignobiles habent, sed maxime celebrant cnecon Italiae ignotam, ipsis autem oleo, non cibo gratam. hoc faciunt e semine eius. differentia prima silvestris et mitior. silvestrium duae species. una mitiori similis,¹ caule tamen rigido; itaque et colu antiquae utebantur ex illis,² quare quidam atractylida vocant. semen eius candidum et grande, amarum. altera hirsutior, torosiore caule et qui paene humi serpat, minuto semine. aculeatarum generis haec est, quoniam distinguenda sunt et genera.

91 LIV. Ergo quaedam herbarum spinosae sunt, quaedam sine spinis. spinosarum multae species. in totum spina est asparagus, scorpio, nullum enim folium habent. quaedam spinosa foliata sunt, ut carduus, erynge, glycyrrhiza, urtica. his enim omnibus foliis inest aculeata mordacitas. aliqua et secundum spinam habent folium, ut tribulus et anonis. quaedam in folio non habent et in caule habent, ut pheos quod aliqui stoeben appellavere.

¹ similis *Urlichs, Detlefsen, Mayhoff*: simili *codd.*

² ex illis *codd.*, *Detlefsen*: exilis *vulg.*: exili *Mayhoff*.

^a Theophrastus (*H.P.* VI. 4, 5) has εὐθυκαυλότερον ("of straighter stalk").

^b *Ex illis.* With the reading of Mayhoff (*exili*): "as a slender distaff."

LIII. The Egyptians have besides many plants of no repute, but they hold in the highest esteem one called *cnechos*; it is unknown in Italy and the Egyptians value it, not as a food, but for its oil, which they extract from the seed. The chief varieties are the wild and the cultivated. Of the wild there are two species. One is similar to the cultivated, but has a stiff^a stem. This is why the women of old used the stem of this species^b as a distaff, for which reason it is called by some *atractylis*. Its seed is white, large and bitter. The other is rather prickly, with a more fleshy stem, which almost trails on the ground, the seed being very small. This belongs to the class of spinous plants, for I must classify also the various kinds of them. *Prickly plants.*

LIV. Some plants then are prickly,^c while others are without prickles. Of prickly plants the species are many. Of nothing but prickles are asparagus and scorio, for they have no leaves at all. Some prickly plants, however, have leaves, for instance thistle, *erynge*,^d *glycyrrhiza*^e and nettle. For all these have a sharp sting in their leaves. Some have foliage also along^f the prickly spine, as caltrop and rest-harrow. Some again have prickles not on the leaves but on the stem, as pheos, that some have

^c Hort translates *ἀκανθικός*, *ἀκανθαί*, in the closely parallel passage of Theophrastus (VI. 1, 2) by "spinous," "spines." It is scarcely possible to use these words in translating Pliny, for he includes the nettle.

^d *Erynge* is sea-holly.

^e "Sweet root," our liquorice.

^f Theophrastus has (VI. 1, 3) *τὰ δὲ καὶ παρὰ τὴν ἀκανθὰν ἔτερον ἔχει φύλλον*: "Others again have leaves as well as their spines" (Hort). Apparently Pliny took *παρὰ* to be "along."

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hippopheos¹ spinis geniculatum. tribulo proprietas quod et fructum spinosum habet.

- 92 LV. Ex omnibus his generibus urtica maxime noscitur acetabulis in flore purpuream lanuginem fundentibus, saepe altior binis cubitis. plures eius differentiae: silvestris quam et feminam vocant, mitiorque. et in silvestri quae dicitur canina acrior, caule quoque mordaci, fimbriatis foliis. quae vero etiam odorem fundit Herculeana vocatur. semen
- 93 omnibus copiosum, nigrum. mirum sine ullis spinarum aculeis lanuginem ipsam esse noxiam et tactu tantum levi² pruritum pusulasque confestim adusto similes existere. notum est ei³ remedium olei. sed mordacitas non protinus cum ipsa herba gignitur, nec nisi solibus roborata. incipiens quidem ipsa nasci vere non ingrato,⁴ multis etiam religioso in cibo est ad pellendos totius anni morbos. silvestrium quoque radix omnem carnem teneriorem facit simul cocta. quae innoxia est, morsu carens, lamium vocatur. de scorpione dicemus inter medicas.

¹ hippopheos post Mayhoff (ex Theophrasto) ego : (in textu Mayhoff et Deilefsen hippophaes cum plurimis codd.)

² levi Mayhoff : leni cum cod. R. Deilefsen.

³ ei dT Sillig, Deilefsen : et vulg. : et (inter uncus) Mayhoff.

⁴ ingrato : vv. ll. ignato, ignoto, grato : ingrata et religiosa del. in ante cibo coni. Mayhoff.

^a Theophrastus (VI. 5, 1) τὰ δὲ καὶ παρὰ τὴν ἄκανθαν ἔχοντα φύλλον, οἷον τὰ τοιαῦτα φέως ὄντων παντάδουσα τρίβλος ἱππόφειος. So it seems that here hippopheos is right, although Dioscorides IV. 159 mentions a plant hippophaes, as does Pliny in XXII. § 29. There was probably some confusion about the names, which may be those of the same plant (sea-spurge). Pliny seems to have used both names. Theo-

called stoebe. Hippopheos^a has prickly joints. A peculiar characteristic of the caltrop is that it has also a prickly fruit.

LIV. Of all these kinds the best known is the *Nettles*. nettle, often taller than two cubits, the cups of which in blossom pour out a purple down.^b There are several different kinds. There is the wild, also called female, and the cultivated. One of the wild varieties, called dog nettle, has a sharper sting, even the stem pricking, and fringed leaves. Another, which also gives out a smell, is called the Herculanean nettle.^c All nettles have a copious, black seed. It is a strange thing that, without any prickly points, the mere down is poisonous, and that only a light touch at once causes to arise itching and blisters like those from burns. The well-known remedy for nettle sting is olive oil. The stinging quality however does not come at once with the plant itself, but only when this has grown strong through the sun. When young indeed in the spring nettles make a not unpleasant food, which many eat in the further devout belief that it will keep diseases away throughout the whole year. The root too of the wild varieties makes more tender all meat with which it is boiled. The harmless nettle, which does not sting, is called lamium. About scorpio I shall speak when I come to deal with medicinal plants.^d

phrastus, IX. 15, 6, says that hippophaes is a drug made from tithymallos, but Hort suspects the text.

^b Not of course the stinging *lanugo* mentioned later on.

^c Unidentified, as all nettles have either a slight smell or none at all.

^d XXII. § 39.

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- 94 LVI. Carduus et folia et caules spinosae lanuginis habet, item acorna, leucacanthos, chalceos, cnecos, polyacanthos, onopyxos, helxine, scolymos. chamaeleon in foliis non habet aculeos. est et illa differentia quod quaedam in his multicaulia ramosaque sunt, ut carduus, uno autem caule nec ramosum cnecos. quaedam cacumine tantum spinosa sunt, ut erynge. quaedam aestate florent, ut tetralix
- 95 et helxine. scolymos quoque sero floret et diu. acorna¹ colore tantum rufo distinguitur et pinguiore suco. idem erat atractylis quoque, nisi candidior esset et nisi sanguineum sucum funderet, qua de causa phonos vocatur a quibusdam, odore etiam gravis, sero maturescente semine nec ante autumnum, quamquam id de omnibus spinosis dici potest. verum omnia haec et semine et radice nasci possunt.
- 96 scolymus carduorum generis ab his distat quod radix eius vescendo est decocta. mirum quod sine intervallo tota aestate aliud floret in eo genere, aliud concipit, aliud parturit. aculei arescente folio desinunt pungere. helxine rara visu est neque in omnibus terris, a radice foliosa, ex qua media veluti malum extuberat contectum sua fronde. huius

¹ *Post acorna add. a cneco ex Theophrasto (H.P. VI. 4, 6) Mayhoff.*

^a Mayhoff's addition, if not a part of the text, must be understood.

^b "Gore" or "bloodshed."

^c Theophrastus has (VI. 4, 6) ἔχει δὲ καὶ τὴν ὀσμὴν δεινὴν καὶ φονώδη. Gravis therefore is not "strong" but "foul."

^d Theophrastus (VI. 4, 8) says this of the sow-thistle (σόγκος).

LVI. The thistle has both leaf and stem covered *Thistles.* by a prickly down, and so have acorna, leucacanthos, chalceos, cnecos, polyacanthos, onopyxos, helxine, scolymos. The chamaeleon has no prickles on its leaves. There is however this difference also, that some of these plants have many stems and branches, the thistle for instance, while the cnecos has one stem and no branches. Some are prickly only at the head, the erynge for instance; some, like tetralix and helxine, blossom in summer. Scolymos too blossoms late and long. The acorna is distinguished (from cnecos)^a only by its reddish colour and richer juice. Atractylis too would be just the same, were it not whiter and did it not shed a blood-like juice that has caused some to call it phonos;^b it also has a bad^c smell, and its seed ripens late—in fact not before autumn, though this can be said of all prickly plants. All of these however can be reproduced either from seed or from the root. Scolymus, one of the thistle group, differs from these in that its root is edible when boiled. It is a strange thing that in this group,^d without intermission throughout the whole summer,^e part blossoms, part buds, and part produces seed. As the leaves dry the prickles cease to sting.^f Helxine is not often seen, and not in all countries; it shoots out leaves from its root, out of the middle of which swells up as it were an apple, covered with foliage of

* Theophrastus (*loc. cit.*) says of the sow-thistle: μέχρι τοῦ θέρους (sc. παρακολουθεῖ) τὸ μὲν κροῦν τὸ δὲ ἀνθοῦν τὸ δὲ σπέρμα τίκτον (I adopt Hort's reading and translation of τὸ μὲν, τὸ δέ).

^f Theophrastus (of the sow-thistle) ξηραίνόμενον δὲ τὸ φύλλον διαχεῖται καὶ οὐκέτι κεντεῖ.

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vertex summus lacrimam continet iucundi saporis acanthicen masticen appellatam.

- 97 LVII. Et cactus quoque in Sicilia tantum nascitur, suae proprietatis et ipse. in terra serpunt caules a radice emissi, lato folio et spinoso. caules vocant cactus, nec fastidiunt in cibis inveteratos quoque. unum autem caulem rectum habet¹ quem vocant pternica, eiusdem suavitatis, sed vetustatis impatientem. semen ei² lanuginis quam pappum vocant, quo detracto et cortice³ teneritas similis cerebro palmae est. vocant ascalian.

- 98 LVIII. Tribulus non nisi in palustribus nascitur. dura⁴ res alibi iuxta Nilum et Strymonem amnes excipitur in cibos, inclinatus in vadum, folio⁵ ad effigiem ulmi, pediculo longo. at in reliquo orbe

¹ habet *Schneider, Dellefsen, Mayhoff*: habent *codd.*

² *Post ei fortasse latet lacuna.*

³ et cortice *codd. et edd.*: fortasse ex cortice vel in cortice vel cortici.

⁴ dura cum V² (*σκληρός Theophrastus et Dioscorides*) *Mayhoff*: dira cum fere omnibus *codd. Dellefsen.*

⁵ *Post folio add. lato (ex Theophrasto IV. 9, 1: τὸ δὲ φύλλον ἐστὶ πλατὺ προσεμφερὲς τῷ τῆς πελέας) Mayhoff.*

^a Theophrastus has only ὑπὸ (*v.l. ἐπὶ*) τῶν φύλλων.

^b If the *habent* of the MSS. be correct, Pliny has construed Theophrastus' sentence, ἕτερον δὲ καυλὸν ὀρθὸν ἀφίσιν (VI. 4, 11) so as to make ἕτερον agree with καυλὸν. Hort, however, translates: "There is another kind which sends up an erect stem." *Unum* is certainly odd, and Pliny very likely mistranslated, writing *habent*: "they have one stem which is upright etc." The kind peculiar to Sicily is *Cynara cardunculus* (cardoon); the one with the erect stem is *Cynara scolymus* (artichoke).

its own.^a The top of its head contains a gum of pleasant flavour, called thorn mastich.

LVII. And cactus also grows only in Sicily; it too has peculiar properties of its own. Its stems, shooting out from the root, trail on the ground; the leaves are broad and prickly. The stems are called cacti, which make, even when preserved, a palatable food. One ^b kind, however, has an upright stem called pternix, of the same pleasant flavour, but it will not keep. The seed is downy, the down ^c being called pappus. When the seeds have been taken away and the rind, there remains something as tender as the brain of the palm. It is called ascalia.

LVIII. Tribulus ^d is found only in marshy places. A hard ^e substance elsewhere, near the rivers Nile and Strymon it is used as food. It bends towards the water, has a leaf like that of the elm, and the stalk is long. But in other parts of the world there

*The cactus
(artichoke)*

*Water
chestnut.*

^a It is hard to resist the suspicion that either the text is corrupt in parts of this chapter or else Pliny has misunderstood Theophrastus. It should be remembered that Pliny probably made notes while a reader read aloud to him. The text of Th. (VI. 4, 11) may be useful: τὸ δὲ περικάρπιον, ἐν ᾧ τὸ σπέρμα, τὴν μὲν μορφὴν ἀκανθῶδες, ἀφαιρεθέντων δὲ τῶν παππωδῶν σπερμάτων ἐδώδιμον καὶ τοῦτο καὶ ἐμφερὲς τῷ τοῦ φοίνικος ἐγκεφάλῳ· καλοῦσι δὲ αὐτὸ σκαλίαν. Detlefsen and Mayhoff have the same text, but I suspect: (a) that Pliny wrongly rendered ἔτερον by *unum*; (b) that there is a lacuna either before or after *ei*, because of the strange genitive *lanuginis*; (c) that *cortice* is not the peel of the *caulis* but Pliny's word here for περικάρπιον, i.e., we should emend to something yielding the sense: "take away the down, and there remains a tender, edible pod"; (d) that αὐτὸ σκαλίαν was read, or heard, as αὐτὸ ἀσκαλίαν.

^d This tribulus (water chestnut) is quite different from the two varieties (caltrops) mentioned below.

^e *Dura* would mean: "regarded as taboo."

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genera duo. uni cicerculae folia, alteri aculeata. hic et serius floret magisque saepta obsidet villarum. semen ei rotundius, nigrum, in siliqua, alteri harenacium.¹ spinosorum etiamnum aliud genus anonis. in ramis enim spinas habet, adposito folio rutae simili, toto caule foliato in modum coronae. sequitur arata frugibus inimica vivaxque praecipue.

99 LIX. Aculeatarum caules aliquarum per terram serpunt, ut eius quam coronopum vocant. e diverso stat anchusa inficiendo ligno cerisque radicis aptae, stant e mitioribus anthemis et phyllanthes et anemone et aphace. caule foliato est crepis et lotos.

100 LX. Differentia foliorum et hic quae in arboribus, brevitate pediculi ac longitudine, angustis ipsius folii, amplitudine, iam vero angulis, incisuris, odore, flore. diuturnior hic quibusdam per partes florentibus, ut ocimo, heliotropio, aphacae, onochili. Multis inter haec aeterna folia sicut quibusdam arborum, in primisque heliotropio, adianto, polio.

101 LXI. Aliud rursus spicatarum genus, ex quo est achynops, alopecuros, stelephuros,—quam quidam ortygem vocant, alii plantaginem, de qua plura dicemus inter medicas—, thryallis. ex his alopecuros spicam habet mollem et lanuginem densam

¹ harenacium *Deilefsen*: harenaceum cum *vulg. Mayhoff*.

^a Theophrastus (VI. 5, 3) has *σησαμῶδες*. Perhaps Pliny took this (misled by the ear) to be *ψαμμῶδες* or *ψαμαθῶδες*.

^b *Mitior* (Greek *ἥμερος*) is one of Pliny's words for "cultivated." That he should have chosen a comparative is odd, and one suspects that Pliny may have taken *ἥμερος* to be a comparative form. Here *mitior* is generally taken to mean "only slightly prickly." Cf. § 90.

^c See XXV. § 80.

are two kinds; the one with leaves like those of the chickling-pea, the other with prickly leaves. The latter blossoms later, and tends to be common in the enclosures round country houses. Its seed is rounder, black, and in a pod; that of the other is like sand.^a Of prickly plants there is yet another *Rest-harrow*, kind—rest-harrow. For it has prickles on the branches, to which are attached leaves like those of rue, the whole stem being covered with leaves so that it looks like a chaplet. It springs up on newly ploughed lands, is harmful to the crops and extremely long-lived.

LIX. The stems of some prickly plants trail *Other plants.* along the ground, those for example of the plant called coronopus. On the other hand anchusa (alkanet), the root of which is used for dyeing wood and wax, stands upright, as do, of the cultivated ^b kinds, anthemis, phyllanthes, anemone and aphace. Crepis and lotus have a foliated stem.

LX. The leaves of these plants differ as do the leaves of trees: in shortness or length of stalk, in the narrowness of the leaf itself, in its size, and further in the corners, and indentations; smell and blossom differ also. The blossom lasts longer on some of them, which flower one part at a time, on ocimum for example, and on heliotropium, aphace and onochilis. Many of these plants, like certain trees, have leaves that never die, the chief being heliotropium, adiantum, hylwort.

LXI. Eared plants are yet another kind, to which belong achynops, alopecuros, stelephuros—by some called ortyx, by others plantago, about which I shall speak more fully in the section on medicinal plants ^{Various plants with flower-spikes} ^c—and thryallis. Of these alopecurus has a soft ear

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- non dissimilem vulpium caudis, unde et nomen. proxuma ei est et stelephuros, nisi quod illa particulatim floret. cichorion et similia circa terram folia habent germinantia¹ ab radice post vergilias.
- 102 LXII. Perdicium et aliae gentes quam Aegypti edunt. nomen dedit avis id maxime eruens. crassas plurimasque habet radices. item ornithogala caule tenero, candido, semipedali, molli, tribus aut quattuor agnatis, radice bulbosa²; coquitur in pulte.
- 103 LXIII. Mirum loton herbam et aegilopa non nisi post annum e semine suo nasci. mira et anthemidis natura, quod a summo florere incipit, cum ceterae omnes, quae particulatim florent, ab ima sui parte incipient.
- 104 LXIV. Notabile et in lappa quae adhaerescit, quod in ipsa flos nascitur non evidens sed intus occultus, et intra seminat³ velut animalia quae in se pariunt. circa Opuntem est herba etiam homini dulcis, mirumque e folio eius radicem fieri ac sic eam nasci.
- 105 LXV. Iasine unum folium habet, sed ita implicatum ut plura videantur. chondrylla amara est et acris

¹ germinantia *Ianus, Deilefsen*: germinant *Mayhoff*: germinantibus *codd.*

² radice bulbosa] post semipedali *codd.*: trans. cum *Ulrichs coll. Dioscoride Mayhoff.*

³ intra seminat *Deilefsen*: intra se germinat *vulg. et Mayhoff.*

^a Alopecurus = fox-tail.

^b See p. xxii.

^c Pliny has compressed Theophrastus (VII. 14, 3) to the point of obscurity. The latter says: ὥσπερ ἐπὶ τῶν γαλεῶν καὶ ῥινῶν ἐκεῖνα τε γὰρ ἐν ἑαυτοῖς ὠτοκήσαντα ζωογονεῖ, καὶ

and thick down, not unlike the tail of a fox;^a hence too its name. Stelephueros is very like it, except that it blossoms bit by bit. Chicory and the plants like it have leaves near the ground, budding from the root after the Pleiades.^b

LXII. Perdicium is eaten by other peoples besides the Egyptians. The name is derived from the partridge, a bird very fond of pecking it out of the ground. It has very many thick roots. There is likewise ornithogala, with a tender white stem half a foot long, soft and with three or four offshoots and a bulbous root. It is boiled in pottage.

LXIII. It is strange that the plant lotos and the aegilops do not germinate from their own seed until a year has passed. Strange too is the nature of anthemis, because it begins to blossom from the top, while all other plants that blossom bit by bit begin to do so from their bottom part.

LXIV. A remarkable thing about the burdock, *Burdock and other plants.* which sticks to one's clothes, is that within it there grows a flower that does not show, but is inside and hidden; it produces seed within itself, as do the animals that bring to birth inside their own bodies.^c Around Opus is to be found a plant which is also ^d pleasant for a man to eat, and remarkable in that from its leaf there grows a root whereby it reproduces itself.

LXV. Bindweed^e has only one petal, but folded in such a way that it seems more than one. Chondrylla

αὕτη τὸ ἄνθος ἐν ἑαυτῇ κατέχουσα καὶ πέττουσα καρποτοκεῖ. For ὡσοκῆσαντα ζωογονεῖ Pliny has simply *in se pariunt*; how much of the original he intended to include we can only guess.

^a The *etiam* represents the καὶ in Th. I. 7, 3: ποιάριον εἶναι δὲ καὶ ἐσθιέσθαι ἐστὶν ἡδύ.

^e *Iasine* is the *ιασώνη* of Theophrastus I. 13, 2.

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in radice suci. amara et aphace et quae picris nominatur, et ipsa toto anno florens. nomen ei amaritudo inposuit.

- 106 LXVI. Notabilis et scillae crocique natura, quod, cum omnes herbae folium primum emittant, mox in caulem rotundentur, in his caulis prior intellegitur quam folium. et in croco quidem flos inpellitur caule, in scilla vero caulis exit, deinde ex eo flos emergit. eademque ter floret, ut diximus, tria tempora arationum ostendens.
- 107 LXVII. Bulborum generi quidam adnumerant et cypiri, hoc est gladioli, radicem. dulcis ea est et quae decocta panem etiam gratiorem faciat ponderosioresque simul subacta. non dissimilis ei est quae thesium vocatur, gustu aspera.
- 108 LXVIII. Ceterae eiusdem generis folio differunt: asphodelus oblongum et angustum habet, scilla latum et tractabile, gladiolus simile nomini. asphodelus manditur et semine tosto et bulbo, set hoc in cinere tosto, dein sale et oleo addito, praeterea tuso cum ficis, praecipua voluptate, ut videtur

^a Here probably the genus, not the saffron crocus in particular. This seems likely from Pliny's authority, Theophrastus, *H.P.* VII. 13, 2.

^b *XXVIII.* § 244.

^c Theophrastus has *ἄροτος* (VII. 13, 6), which Hort translates "seed-time."

^d It is difficult to see why the translators render: "when boiled and kneaded with bread makes it etc." So too Hort, translating Theophrastus VII. 12, 3: *ἡ τοῦ φαργάνου καλουμένη* (sc. *ρίζα*) *γλυκεῖα τε ἐψηθείσα, καὶ τριψθεῖσα μινυμένη τῷ ἀλεύρῳ ποιεῖ τὸν ἄρτον γλυκὺν καὶ ἀσινῆ. ἐψηθείσα* goes with *γλυκεῖα* (ἐστίν) and *τριψθεῖσα* with *ποιεῖ*. But *ponderosiores* is a strange rendering of *ἀσινῆ* ("wholesome," Hort), and Mayhoff suggests *spongiosiores* without, however, printing it in his text.

is bitter, and in the root is an acrid juice. Aphace too is bitter, and so is the plant called picris, which also blossoms throughout the year. It is this bitterness which has given the plant its name.

LXVI. It is a remarkable characteristic too of the squill and of the crocus^a that, whereas all other plants put forth leaves first and only afterwards round into a stem, in these plants the stem is seen first, and after the stem the leaves. In the crocus however the blossom is pushed up by the stem; in the squill on the other hand the stem makes its appearance first, and then the blossom sprouts out of it. The plant blossoms, as I have said,^b three times a year, pointing to the three seasons for ploughing.^c

LXVII. Some include among the class of bulbs the root of the cyprios, that is, of the gladiolus. It makes a pleasant food, one which, when boiled, also renders bread more palatable, and also when kneaded with it more weighty.^d Not unlike it is the plant which is called thesium, and is acrid to the taste.

LXVIII. The other plants of the same kind differ in the leaf: asphodel has an oblong, narrow leaf; the squill one broad and flexible; the gladiolus one that its name suggests.^e Asphodel is used as food. Both the seed and the bulb are roasted, but the second in hot ashes; salt and oil are added. It is also pounded with figs, which Hesiod^f thinks is a

^a *Gladiolus*, i.e., "little sword."

^f *Works and Days*, 41; here however Hesiod mentions asphodel as a common but wholesome food. Theophrastus, whom Pliny copies, has πλείστην ὄνησιν ἔχει, which is much nearer Hesiod's ἀσφοδὲλῳ μέγ' ὄνειρα.

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- Hesiodo. tradunt et ante portas villarum satum remedio esse contra veneficiorum noxiam. asphodeli
 109 mentionem et Homerus fecit. radix eius napis modicis similis est, neque alia numerosior LXXX simul acervatis saepe bulbis. Theophrastus et fere Graeci princepsque Pythagoras caulem eius cubitalem et saepe duum cubitorum, foliis porri silvestris, anthericum vocavere, radicem vero, id est bulbos, asphodelum. nostri illud albucum vocant et anthericum ¹ hastulam ² regiam, caulis acinosi, ac duo
 110 genera faciunt. albucum scapus cubitalis, amplius, purus, levis, de quo Mago praecipit exitu mensis Marti et initio Aprilis, cum floruerit, nondum semine eius intumesciente, demetendum findendosque scapos et quarto die in solem proferendos, ita siccati ma-
 111 nipulos faciendos. idem oiston adicit ³ a Graecis vocari quam inter ulvas sagittam appellamus. hanc ab idibus Maiis usque in finem Octobris mensis decorticari atque leni sole siccari iubet, idem et gladiolum alterum quem cypiron vocant et ipsum palustrem, Iulio mense toto secari iubet ad radicem

¹ anthericum *ego*: asphodelum *codd. et edd.*

² hastulam *cum vulg. Mayhoff*: assulam *cum V d Detlefsen.*

³ oiston adicit *Mayhoff* (oiston dicit *Weise*): pistana *cum V² R.E Detlefsen.*

^a *Odyssey* XI. 539 and XXIV. 13.

^b *H.P.* VII. 13, 2 and 3.

^c A difficult sentence. Why is *illud* neuter? Jan's index assumes that the plant is here *albucum*, but it is *albus* in XXVI. § 21. A more serious difficulty is that the MSS. reading implies that the Latin name for *anthericum* is *albus*; but the latter, as we see, is not a stem but *has* one. Very doubtfully I suggest that Pliny either wrote *anthericum* and not *asphodelum*, or wrote the latter by mistake for the former.

special delicacy. There is a tradition that if asphodel be planted before the gate of a country house it keeps away the evil influences of sorcery. Homer^a also mentioned asphodel. Its root is like a navew of moderate size, and no plant has more bulbs, eighty being often grouped together. Theophrastus^b and the Greeks generally, beginning with Pythagoras, have given the name of anthericus to its stem, a cubit and often two cubits long, with leaves like those of wild leek; it is the root, that is to say the bulbs, that they call asphodel. We of Italy call this plant albucus,^c and anthericus "royal spear", the stem of which bears berries, and we distinguish two kinds. Albucus has a stalk a cubit long, large, without leaves and smooth, which Mago^d recommends should be cut at the end of March or the beginning of April, when the blossoming has ceased but before its seed has begun to swell; he adds that the stalks should be split, and brought out into the sun on the fourth day, and that of the material so dried bundles should be made. The same authority adds that the Greeks call oistos,^e the plant which we include among sedge and call arrow. He recommends that from the fifteenth of May to the end of October it should be stripped of its skin and dried in mild sunshine, and also that the second kind of gladiolus, called cypiros, which too is a marsh plant, should be cut down to the root through-

^a See XVIII. § 22.

^b The *pistana* of Detlefsen can scarcely be right, an accusative being required, and the word is ἀπαξ λεγόμενον. Weise's conjecture as emended by Mayhoff is palaeographically easy, and οἰστός does mean "arrow," being found, though rarely, in good prose.

PLINY : NATURAL HISTORY

tertioque die in sole siccari, donec candidus fiat, cotidie autem ante solem occidentem in tectum referri, quoniam palustribus desectis nocturni rores noceant.

- 112 LXIX. Similia praecipit et de iunco quem mariscum appellant, ad texendas tegetes et ipsum Iunio mense eximi ad Iulium medium praecipiens, cetera de siccando eadem quae de ulva suo loco diximus. alterum genus iuncorum facit quod marinum et a Graecis oxyschoenon vocari invenio. tria genera eius: acuti, sterilis, quem marem et oxyn Graeci vocant; reliqua feminini, ferentis semen
- 113 nigrum. quem melancranim appellant, crassior hic et fruticosior, magisque etiamnum tertius qui vocatur holoschoenus. ex his melancranis sine aliis generibus nascitur, oxys autem et holoschoenus eodem caespite. utilissimus ad vitilia holoschoenus, quia mollis et carnosus est. fert fructum ovorum cohaerentium modo. nascitur autem et is quem marem appellavimus ex semetipso cacumine in terram defixo, melancranis autem suo semine.
- 114 alioqui omnium radices omnibus annis intermoriuntur. usus ad nassas marinas, vitilium elegantiam, lucernarum lumina, praecipua medulla, amplitudine iuxta maritimas Alpes tanta ut inciso ventre inpleant paene unciarum latitudinem, in Aegypto vero

^a This is supposed to refer to § 111.

^b The text is possibly corrupt. *Cribrorum* is probably right, being a very natural word for one who wishes to speak of a small hole, but the last four words seem pointless. Mayhoff's conjecture (*cubitorum*) means: "while in Egypt they are a cubit in length, which is not a more useful size than others."

out July, and on the third day dried in the sun until it turns white. Every day however before sunset it should be put back under cover, since night dews are harmful to marsh plants after they have been cut down.

LXIX. Mago gives like instructions about the *Rushes*. rush also that they call mariscus; for weaving mats he recommends that it too be gathered in June and up to the middle of July, giving the same instructions for drying it which I have mentioned in their proper place when dealing with sedge.^a He distinguishes another kind of rush, which I find is called the marine rush and by the Greeks oxyschoenos. There are three kinds of it: the pointed, barren rush, which the Greeks call the male, or oxys, while the other two are female, and bear a black seed. One of these, called by the Greeks melancranis, is thicker and more bushy than the first; the third, called holoschoenus, being even more so. Of these melancranis is found apart from other kinds of rush, but oxys and holoschoenus grow on the same turf. The most useful for wicker-work is holoschoenus, because it is pliant and fleshy; it bears a fruit like eggs sticking to one another. The rush we have called male is self-reproduced, the head being bent down into the earth, but melancranis is reproduced from its seed. Except for this, the roots of every kind of rush die every year. Rushes are used for fish-baskets, for the finer sort of wicker-work, and for the wicks of lamps, the pith being especially useful; and they grow to such a size near the maritime Alps that when the hollow is cut open they measure almost an inch across, while in Egypt some are as narrow as the holes in a sieve,^b and of a length not

PLINY : NATURAL HISTORY

- 115 cribrorum, longitudine non aliis utiliore.¹ quidam etiamnum unum genus faciunt iunci trianguli—cyperon vocant—multi vero non discernunt a cypiro vicinitate nominis. nos distinguemus utrumque. cypirus est gladiolus, ut diximus, radice bulbosa, laudatissimus in insulis Creta, dein Naxo et postea in Phoenice. Cretico candor odorque vicinus nardo, Naxio acrior, Phoenicio exiguum spirans, nullus
- 116 Aegyptio, nam et ibi nascitur. discutit duritias corporum; iam remedia enim dicemus, quoniam et florum odorumque generi est magnus usus in medicina. quod ad cypiron attinet, Apollodorum quidem sequar, qui negabat² bibendum, quamquam professus efficacissimum esse adversus calculos, quos eo movet.³ feminis quidem abortus facere non dubitat, mirumque tradit barbaros suffitum huius herbae excipientes ore lienes consumere et non egredi domibus nisi ab hoc suffitu. vegetiores enim firmioresque sic etiam in dies⁴ fieri. intertriginum

¹ cribrorum, longitudine non aliis utiliore. *Detlefsen*: cubitorum longitudinem non aliis utiliore. *Mayhoff*: cymbiorum, longitudine, utiliore *coni.* *Ianus*: cimbrorum, umbrorum, cribrorum, longitudinem, utiliore (viliorem E) *codd.*

² negabat *codd.*: negat *Mayhoff*.

³ quos eo movet *ego*: hos eo movet *Detlefsen*: eos fovet *RE*: os eo fovet *Mayhoff*, qui calculos et potu, et vulvas eo fovet *coniecit*.

⁴ in dies, in die, *codd.*: in diem *Sillig*.

^a See § 107 of this book.

^b Or perhaps "important." See § 117, *magni in medicina usus*, where there is the same ambiguity.

more useful than others. Some botanists also distinguish as a separate class a triangular rush, which they call cyperos, though many do not recognize a distinction because of the resemblance of the name to cypiros. I however shall keep each distinct. Cypiros is, as I have said,^a the same as gladiolus, *Gladiolus and its medicinal uses.* and has a bulbous root. The most esteemed grows in the island of Crete, the next in Naxos and then comes that of Phoenicia. The Cretan is white, with a smell like that of nard; the Naxian has a more pungent smell, the Phoenician a faint one, and the Egyptian (for it grows there also) none at all. Cypiros dispels hard formations of the body, for we must now speak of remedies, as there is a wide^b use in medicine of flowers and perfumes^c generally.^d As for cypiros, I shall follow Apollodorus who said that it should never be taken in drink; yet he maintained its great efficacy for stones in the bladder, which by this means he tries to remove.^e He has no doubt that it causes miscarriage in women, and records the following strange account of it. Some foreign people, he says, take into the mouth smoke from this plant and thereby reduce the spleen, asserting that they do not leave their homes without inhaling this smoke, as the habit produces, even from day to day, increased briskness and greater strength. He adds

^c Unguents are included among *odores*.

^d The addition of *generi*, which at first sight seems otiose, means that the class as a whole is of great use.

^e Mayhoff's text: "He uses it as a fomentation for the face." We expect, however, a contrast to *negabat bibendum*, and some reading, similar to Mayhoff's conjecture *et potu*, bringing out the inconsistency of Apollodorus, should probably be adopted. But, as Mayhoff remarks, "*omnia dubia*."

PLINY : NATURAL HISTORY

et alarum vitiis perfrictionibusque cum oleo inlitum non dubie mederi.

- 117 LXX. Cyperos iuncus est, qualiter diximus, angulosus, iuxta terram candidus, cacumine niger pinguisque. folia ima porraceis exiliora, in cacumine minuta, inter quae semen est. radix olivae nigrae similis, quam, cum oblonga est, cyperida vocant, magni in medicina usus. laus cypero prima Hammoniaco, secunda Rhodio, tertia Theraeo, novissima Aegyptio, quod ¹ et confundit intellectum, quoniam et cypiros ibi nascitur. sed cypiros radice ² durissima vixque spirans, cyperis ³ odor et ipsis nardum imitans. est et per se Indica herba quae cypira vocatur, zingiberis effigie. comman-
- 118 ducata croci vim reddit. cypero vis in medicina psilotri. inlinitur pterygiis ulceribusque genitalium et quae in umore sunt omnibus, sicut oris ulceribus. radix adversus serpentium ictus et scorpionum praesentis remedii est. vulvas aperit pota; largiori tanta vis ut expellat eas. urinam ciet et calculos, ob id utilissima hydropicis. inlinitur et ulceribus quae serpunt, sed his praecipua quae in stomacho sunt, e vino vel aceto inlita.

¹ quod *Detlefsen* d *secutus* : quae *vulg.* : qui *Mayhoff* : que *quattuor codd.*

² radice *add. Mayhoff.*

³ cyperis *Mayhoff* : ceteris *cum codd. Detlefsen.*

^a *Perfrictio* can also mean a severe cold or chill.

^b Sweet rush. ^c See § 115. ^d See note on § 116.

^e The reading of the MSS., which *Detlefsen* follows, makes *cypiros* feminine, although it is masculine in § 115 : "Egyptian cypiros is very hard and nearly odourless, while other varieties have themselves a smell closely resembling that of nard." But the misunderstandings referred to in the preceding

that to apply cypiros as a liniment with oil is a certain cure for chafings, offensive armpits and abrasions.^a

LXX. Cyperos^b is a rush such as I have already^c *Sweet rush.* described, with three corners, white next the ground, dark and fleshy at the head. The bottom leaves are more slender than those of leeks, the top ones being very small, with the seed between them. The root resembles that of the dark olive, which when it is oblong is called cyperis, being widely used in medicine.^d The most valued cyperos comes from the region round the temple of Hammon, the second in esteem from Rhodes, the third from Thera, the last from Egypt; as the cypiros also grows there, some confusion of thought results. But cypiros has a very hard root and scarcely any smell; the species of true cyperos^e have a smell that closely resembles that of nard. There is also a separate Indian plant called cypira, in shape resembling ginger, which when chewed tastes like saffron. The use of cyperos in medicine is to act as a depilatory. It makes an ointment for hang-nails, sores of the genitals and all sores that are in moisture, such as those in the mouth. Its root affords an effective remedy for the bites of snakes and stings of scorpions. The root taken in drink opens the passage of the uterus, but if taken in too strong doses its potency is great enough to cause prolapsus. It promotes urine and the passing of stone, and therefore is most useful to sufferers from dropsy. It is applied to spreading sores, but especially to those of the gullet, either in wine or in vinegar.

sentence result from the similarity of the word cyperos to cypiros; a difference between Egyptian cypiros and other varieties of it is surely irrelevant.

PLINY: NATURAL HISTORY

- 119 LXXI. Iunci radix in tribus heminis aquae decocta ad tertias tussi medetur. semen tostum et in aqua potum sistit et alvum et feminarum menses. capitis dolores facit qui vocatur holo-schoenus. quae proxima sunt radici commandu-cantur adversus araneorum morsus. invenio etiam-num iunci genus quod euripicen vocant. huius semine somnum adlici, set modum servandum ne sopor fiat.
- 120 LXXII. Obiter et odorati iunci medicinae di-centur, quoniam et in Syria Coele, ut suo loco rettulimus, nascitur. laudatissimus ex Nabataea cognomine teuchitis, proximus Babylonius, pessimus ex Africa ac sine odore. est autem rotundus, vinosae¹ mordacitatis ad linguam. sincerus in confricando odorem rosae emittit rubentibus fragmentis. discutit inflationes, ob id stomacho utilis bilemque reicientibus. singultus sedat, ructus movet, urinam ciet, vesicae medetur. ad muliebres usus decoquitur. opisthotonicis cum resina arida inponitur excalfactoria vi.
- 121 LXXIII. Rosa adstringit, refrigerat. usus eius dividitur in folia et flores et capita. foliorum partes

¹ vinosae cum *codd.* Mayhoff: virosae *Urlichs, Deilefsen.*

^a See XII. § 104. Many editors (*Sillig, Jan, Mayhoff*) with the Plinian critic *Urlichs*) consider the text to be corrupt here and would emend in some way or other. But the sequence of the thought is natural enough. Pliny has already mentioned one place where the fragrant rush is to be found, and he here goes on to give the others.

^b Pliny has expressed himself carelessly, for how can a fragrant rush be without scent? *Dioscorides* has (I. 17) ἀρχηστος.

LXXI. The root of the rush in three heminae of water, boiled down to one third, is a cure for coughs. The seed roasted and taken in water checks diarrhoea and excessive menstruation. The rush, however, called *holoschoenus* brings on headaches. The nearest parts to the root are chewed as a remedy for the bites of spiders. I find that there is also one other kind of rush, called *euripice*. Its seed is said to induce sleep, but the dose must be kept small, or coma will result.

LXXII. Incidentally I will also mention medicines Medicines from scented rush. obtained from the scented rush, for one place where such a rush grows is in Coelesyria, as I have related in the appropriate place.^a The most esteemed, however, comes from Nabataea, known also as *teuchitis*; the next best is the Babylonian, and the worst comes from Africa, being without any scent.^b It is round, affecting the tongue with the stinging taste of sour wine.^c The genuine kind, on being rubbed, gives out a smell of roses, and the broken bits are red. Dispersing flatulence, it is good for the stomach, and for those who vomit bile. It allays hiccoughs, promotes belching, is diuretic, and a remedy for bladder troubles. For female complaints a decoction is made. With dry resin it is applied to sufferers from opisthotonic tetanus because of its warming properties.

LXXIII. The rose is both astringent and cooling. Medicinal uses of the rose. There are separate uses for its petals, flowers and heads. The parts of the petals which are white are

^a The phrase in Dioscorides, *μετὰ ποσῆς* (v.l. *πολλῆς*) *πυρώσεως* made Ulrichs suggest *virosae*, "foul." But Mayhoff defends *vinosae*, comparing XIII. § 113, XXIII. § 106 and XXVII. § 28.

PLINY : NATURAL HISTORY

- quae sunt candidae ungues vocantur. in flore aliud est semen, aliud capillus, in capite aliud cortex, aliud calix. folium siccatur aut tribus modis exprimitur: per se, cum ungues non detrahuntur—ibi enim umoris plurimum—aut cum detractis unguibus reliqua pars aut oleo aut vino maceratur in sole vasis vitreis.
- 122 quidam et salem admiscent, nonnulli et anchusam aut aspalathum aut iuncum odoratum, quia talis maxime prodest vulvae ac dysintericis. exprimuntur eadem folia detractis unguibus trita per linteam spissum in aereum vas, lenique igni sucus coquitur, donec fiat crassitudo mellis. ad haec eligi oportet odoratissima quaeque folia. vinum
- 123 quomodo fieret e rosa diximus inter genera vini. usus suci ad aures, oris ulcera, gingivas, tonsillas gargarizati, stomachum, vulvas, sedis vitia, capitis dolores—in febris per se vel cum aceto—somnos, nausias. folia uruntur in calliblepharum, et siccis femina adsparguntur. epiphoras quoque arida leniunt. flos somnum facit, inhibet fluctiones mulierum, maxime albas, in posca potus et sanguinis excreationes, stomachi quoque dolores cyathus¹ in

¹ cyathus *Detlefsen*: quantum aut tantum *codd.* Fortasse paulum.

^a From the white at the base of the human nail.

^b For *cortex* see §§ 14 and 20. By *semen* Pliny surely means pollen.

^c In this chapter Pliny has many details found in Dioscorides I. 99, but adds others. Dioscorides gives one method only of extracting the juice, apparently the third, but states fewer particulars than Pliny.

^d See XIV. § 106.

^e καίεται δὲ καὶ εἰς τὰ καλλιβλέφαρα. Diosc.

^f ξηρὰ δὲ λεία παραμυρρίοις προσπάσεται. Diosc.

^g This emendation of *Detlefsen* is probably right, although *Mayhoff's* suggested alteration to *cyathos* is attractive. The

called nails.^a In the flower, seed and filament are distinct, as are shell ^b and calyx in the head. The petals are dried, or the juice is extracted from them by one of three methods. They may be treated by themselves, when the nails, in which there is most moisture, are not removed; or when what is left after removing the nails is steeped with oil or wine in glass vessels in the sunshine. Some add salt also, and a few alkanet or aspalathus or fragrant rush, because so prepared the essence is very beneficial for complaints of the uterus and for dysentery. With the nails removed the petals may also have their juice extracted by being pounded, and then strained through a thick linen cloth into a bronze vessel; the juice is then heated on a slow fire until it becomes as thick as honey. For this process only the most fragrant petals must be selected.^c How wine is made from roses I have described in my treatment of the various kinds of wine.^d Rose juice is used for the ears, sores in the mouth, the gums, as a gargle for the tonsils, for the stomach, uterus, rectal trouble, headache—when due to fever either by itself or with vinegar—to induce sleep or to dispel nausea. The petals are burned to make an ingredient of cosmetics ^e for the eyebrows, and dried rose leaves are sprinkled on (chafed) thighs.^f Fluxes of the eyes also are soothed by the dried leaves. The flower induces sleep, checks menstrual, particularly white, discharges if taken in vinegar and water, as well as the spitting of blood; a cyathus ^g of it in three cyathi of wine relieves stomach-ache.

quantum or *tantum* of the MSS. could be retained if either word, perhaps with the addition of some such word as *sufficit*, were a common Latin expression for a sufficiency or modicum.

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- 124 vini cyathis tribus. seminis optimum crocinum, nec anniculo vetustius, et in umbra siccatum; nigrum inutile. dentium dolori inlinitur, urinam ciet, stomacho inponitur, item igni sacro non veteri. naribus subductum caput purgat. capita pota ventrem et sanguinem sistunt. ungues rosae epiphoris salubres sunt; ulcera enim oculorum rosa sordescunt, praeterquam initiis epiphorae, ita ut
- 125 arida cum pane inponatur. folia quidem intus stomachi rosionibus et vitiis ¹ ventris aut intestinorum utilissima et praecordiis, vel inlita. cibo quoque lapathi modo condiuntur. cavendus in his situs celeriter insidens. et aridis aut expressis aliquis usus. diaspasmata inde fiunt ad sudores coercendos, ita ut a balineis inarescant corpori, dein frigida abluantur. silvestris pilulae cum adipe ursino alopecias emendant.
- 126 LXXIV. Lili radices multis modis florem suum nobilitant, contra serpentium ictus ex vino potae et contra fungorum venena. propter clavos pedum in vino decoquantur triduoque non solvuntur. cum adipe aut oleo decoctae pilos quoque adustis reddunt. e mulso potae inutilem sanguinem cum alvo trahunt, lienique et ruptis, vulsis prosunt et
- ¹ vitiis *Detlefsen, vulg.*: intus *codd.*: *uncis sechusit Mayhoff.*

^a See p. 261, note b.

^b See p. 16, note f.

^c That is, galls.

As to the seed, the finest is of a saffron colour, not more than a year old, and should be dried in the shade; the dark seed is harmful. It is used as a liniment for toothache, is diuretic, and may be applied to the stomach or in cases of erysipelas that is not of long standing. Inhaled by the nostrils it clears the head. Rose heads taken in drink check diarrhoea and haemorrhage. The nails of rose petals are healing for fluxes of the eyes, for eye-sores discharge if the whole rose is applied, unless it is at the beginning of the flux, and then the rose must be dry and mixed with bread. The petals indeed taken internally are very good for gnawings of the stomach^a and for complaints of the belly or of the intestines, good also for the hypochondria,^b and they may be applied externally. They are also preserved for food, in the same way as sorrel. Care must be taken with rose petals, as mould quickly settles on them. Some use can be made of dried petals, or those from which the juice has been extracted. Powders, for example, are made from them to check perspiration. These are sprinkled on the body after a bath and left to dry, being afterwards washed off with cold water. The little balls^c on the wild rose mixed with bears' grease are a remedy for mange.

LXXIV. Its roots bring great fame to the lily in many ways, being taken in wine for the bites of snakes and for poisoning by fungi. For corns on the foot they are boiled down in wine; and the plaster is not removed for three days. Boiled down with grease or oil they also make hair to grow again on burns. Taken in honey wine they carry off by stool extravasated blood; they are good for the spleen, for

*Medicinal
uses of the
lily.*

PLINY : NATURAL HISTORY

- mensibus feminarum, in vino vero decoctae inpositae-
 127 que cum melle nervis praecisis. medentur contra
 lichenas et lepras, et furfures in facie emendant,
 erugant cutem.¹ folia in aceto condita² vulneribus
 inponuntur, si testium, melius cum hyoscyamo et
 farina tritici. semen inlinitur igni sacro, flos et
 folia ulcerum vetustati, sucus qui flore expressus
 est—ab aliis mel vocatur, ab aliis syrium—ad
 emolliendas vulvas sudoresque faciendos et sup-
 purationes concoquendas.
- 128 LXXV. Narcissi duo genera in usum medici
 recipiunt, purpureo flore et alterum herbaceum, hunc
 stomacho inutilem et ideo vomitorium alvosque
 solventem, nervis inimicum, caput gravantem et a
 narce narcisum dictum, non a fabuloso puero.
- 129 utriusque radix mulsei saporis est. ambustis prodest
 exiguo e melle, sic et vulneribus et luxatis, panis
 vero cum melle et aerina³ farina. sic et infixi
 corpori extrahit. in polenta tritus oleoque contusis
 medetur et lapide percussis. purgat vulnera per-
 mixtus farinae, nigras vitilignes emaculat. ex hoc

¹ cutem. *ego*: corpora, cutem. *Mayhoff*: corpora. cum
 polio folia *Sillig*, *Detlefsen*: corpora. cum folia *codd*.

² condita *coni*. *Mayhoff coll*. *Dioscoride*: cocta *codd*.

³ aerina *Mayhoff secutus Barbarum*: avenae cum *codd*.
Detlefsen.

^a With the reading of *Sillig*, which *Detlefsen* adopts:
 "boiled in vinegar with polium." Polium was a plant,
 probably hulkwort (*Teucrium polium*), sometimes used as a
 healing remedy. It had a strong, not unpleasant smell
 (βαρύοσμον μετὰ ποσῆς εὐωδίας. *Dioscorides* III. 110). Cf.
 §§ 145-147.

ruptures, spasms and the menstrual discharge; while if boiled down in wine and applied with honey they heal cuts of the sinews. They are healing for lichens and leprous sores, cure scurf on the face, and remove wrinkles from the skin. The petals,^a pickled in vinegar, are applied to wounds; if these are in the testes, it is better to add henbane and wheat flour. The seed is used as an application for erysipelas, flowers and leaves for chronic sores, and the juice extracted from the flower, called honey by some and syrium by others, as an emollient of the uterus, for inducing perspiration and for bringing boils to a head.

LXXV. Of the narcissus there are two kinds used *And of the narcissus.* by physicians: one with a bright ^b flower and the other with grass-green leaves.^c The latter is injurious to the stomach, so that it acts as an emetic and as a purge; it is bad for the sinews and causes a dull headache, its name being derived from the word narce, torpor, and not from the youth in the myth. The root of each variety has the taste of honey wine. In a little honey it is good for burns, and the same is beneficial for wounds and sprains, while for superficial abscesses honey should be added to darnel ^d meal. This preparation also extracts bodies that have pierced the flesh. Beaten up in pearl barley and oil it heals bruises, and wounds caused by stones. Mixed with meal it cleans wounds and removes black psoriasis.^e From its

^b The adjective *purpureus* probably refers here to the red nectary of the flower, but it is always a difficult word both to interpret and to translate.

^c Such is the most likely meaning of *narcissus herbaceus*.

^d Or, with the reading *avenae*, oatmeal.

^e For this see Celsus V. 28, § 19.

PLINY : NATURAL HISTORY

flore fit narcissinum oleum ad emolliendas duritias, calfacienda quae alserint, auribus utilissimum, sed et capitis dolores facit.

- 130 LXXVI. Violae silvestres et sativae. purpureae refrigerant. contra inflammationes inlinuntur stomacho, ardenti inponuntur et capiti in fronte, oculorum privatim epiphoris et sede procidente volvave et contra suppurationes. crapulam et gravedines capitis inpositis coronis olfactuque discutunt, anginas ex aqua potae. id quod purpureum est ex his comitialibus medetur, maxime pueris, in
- 131 aqua potum. semen violae scorpionibus adversatur. contra flos albae suppurata aperit, ipsa discutit. et alba autem et lutea extenuat menses, urinam ciet. minor vis est recentibus, ideoque aridis post annum utendum. lutea dimidio cyatho in aquae tribus menses trahit. radices eius cum aceto inlitae sedant lienem, item podagram, oculorum autem inflammationes cum murra et croco. folia cum melle purgant capitis ulcera, cum cerato rimas sedis et quae in umidis sunt, ex aceto vero collectiones sanant.
- 132 LXXVII. Baccar in medicinae usu aliqui ex nostris perpressam vocant. auxiliatur contra serpentes, capitis dolores fervoresque, item epiphoras. in-

^a *Stomachus* might mean gullet here. See p. 261, note b.

^b *Folia* might mean petals.

flower is made narcissus oil, which is very useful for softening callosities, for warming parts of the body that have been chilled, and for the ears, but it also produces headache.

LXXVI. There are both wild and cultivated *And of violets.* violets. The mauve ones are cooling and are applied to the stomach ^a for inflammations, to the forehead also when the head burns, to the eyes especially for fluxes, for prolapsus of the anus and of the womb, and to abscesses. Placed on the head in chaplets, or even smelt, they disperse the after-effects of drinking and its headaches, as well as quinsies when taken in water. The mauve variety, taken in water, is a cure for epilepsy, especially in children. The seed of the violet neutralizes the stings of scorpions. On the other hand the flower of the white violet opens abscesses, and even disperses them. Both the white violet, however, and the yellow reduce the menstrual discharge and are diuretic. Freshly gathered they have less potency, for which reason they should be dried and not used until they are at least a year old. Half a cyathus of the yellow violet taken in three of water promotes menstruation. Its roots used with vinegar as a liniment soothe the spleen, and likewise gout, but for inflammations of the eyes myrrh and saffron should be added to them. The leaves ^b with honey cleanse sores on the head. With wax ointment they heal cracks in the anus and such as are in moist parts of the body. Used with vinegar, however, they heal abscesses.

LXXVII. The Celtic valerian used in medicine is called "perpressa" by some Roman authorities. It relieves serpent bites, aching and feverish heads, and likewise fluxes from the eyes. It is applied to breasts

PLINY : NATURAL HISTORY

- ponitur in mammis tumentibus a partu et aegilopiis incipientibus ignibusque sacris. odor somnum gignit. radicem decoctam bibere spasticis, eversis, 133 convulsis, suspiriosis salutare est et in tussi vetere.¹ rami eius tres quattuorve decocuntur ad tertias partes; haec potio mulieres ex abortu purgat, laterum punctiones tollit et vesicae calculos. tunditur cum lilio² in diaspasmata. vestibus odoris gratia inseritur. combretum quod simile ei diximus tritum cum axungia vulnera mire sanat.
- 134 LXXVIII. Asarum iocinerum vitiis salutare esse traditur uncia sumpta in hemina mulsi mixti. alvum purgat ellebori modo, hydropicis prodest et praecordiis vulvisque ac morbo regio. in mustum si addatur, facit vinum urinis ciendis. effoditur cum folia emittit,³ siccatur et conditur. in umbra⁴ situm celerrime sentit.
- 135 LXXIX. Et quoniam quidam, ut diximus, nardum rusticum nominavere radicem baccaris, contexamus et Gallici nardi remedia in hunc locum dilata in peregrinis arboribus. ergo adversus serpentes duabus drachmis in vino succurrit, inflatio-

¹ est et in tussi vetere. *Mayhoff*: est. in tussi vetere cum *codd.* *Dellefsen*.

² cum lilio in diaspasmata *secutus Ianum Dellefsen*: et utiliter in diaspasmata *Mayhoff*: cum diligentia paemata aut cum diaspasmata *codd.*

³ emittit aut mittit *codd.*: emittit *Dellefsen*: mittit *Mayhoff*, qui et amittit *coni.*

⁴ *Sic dist. Mayhoff*: post umbra *Dellefsen*.

^a For *aegilops* see p. ix and Celsus VII. 7, 7.

^b See § 30 of this book.

^c Dioscorides I. 9 (10 RV Wellmann) says of *ἄσαρον*, *Ῥωμαῖοι περπρέσσαμ, οἱ δὲ βάκχαρ . . . Γάλλοι βάκαρ.*

swollen after child-birth, to incipient fistulas ^a of the eye and to erysipelas. The smell induces sleep. It is beneficial for a decoction of the root to be taken by sufferers from cramp, violent falls, convulsions, asthma and also chronic cough. Three or four sprays of it are boiled down to one third. A draught of this is cleansing for women after miscarriage, and removes stitch in the side or stone in the bladder. It is pounded with lily petals to make dusting powders, and for the sake of the perfume is laid among clothes. Combretum, which I have said ^b is similar to Celtic valerian, beaten up with axle-grease is a wonderful cure for wounds.

LXXVIII. Hazelwort ^c is said to be beneficial for liver complaints, an ounce being taken in a hemina of diluted honey wine. It purges the bowels after the manner of hellebore, and is good for dropsy, the hypochondria, the uterus and for jaundice. When added to must it makes a diuretic wine. It is dug up when the leaves are forming; ^d it is dried and then stored up. In the shade it very quickly goes mouldy.

*Uses of
hazelwort
and of other
plants.*

LXXIX. Since certain authorities, as I have said, ^e have given to the root of Celtic valerian the name of rustic nard, I will now add the medicinal uses of Gallic nard also, which I mentioned when dealing with foreign trees, ^f postponing fuller treatment to the present occasion. So for serpent bites it is useful in doses of two drachmae taken in wine, for flatulence

^a With Mayhoff's conjecture, "falling," Dioscorides does not help, but to dig up a plant before the leaves are fully formed is odd. Perhaps *folia* means petals.

^e See § 29 of this book. Dioscorides (*loc. cit.*) has *ἀραρον* οἱ δὲ *νάρδος ἁγρία*.

^f See XII. § 45.

PLINY : NATURAL HISTORY

- nibus coli vel ex aqua vel ex vino, item iocineris et renium suffusisque felle et hydropicis, per se vel cum absinthio. sistit purgationum mulierum impetus.
- 136 LXXX. Eius vero quod phun eodem loco appellavimus radix datur potui trita vel decocta ad strangulatus vel pectoris dolores vel laterum quoque. menses ciet. bibitur cum vino.
- 137 LXXXI. Crocum melle non solvitur nulloque dulci, facillime autem vino aut aqua. utilissimum in medicina. adservatur cornea pyxide. discutit inflammationes omnes quidem, sed oculorum maxime, ex ovo intus,¹ vulvarum quoque strangulatus, stomachi exulcerationes, pectoris et renium, iocinerum, pulmonum vesicarumque, peculiariter inflammationi earum vehementer utile, item tussi et pleuriticis.
- 138 tollit et pruritus, urinas ciet. qui crocum prius biberint crapulam non sentient, ebrietati resistant. coronae quoque ex eo mulcent ebrietatem. somnum facit, caput leniter movet, venerem stimulat. flos eius igni sacro inlinitur cum creta Cimolia. ipsum plurimis medicaminibus miscetur, collyrio uni etiam nomen dedit.

¹ intus *post Ianum Dellefsen*, cf. XIV. 150 et XXII. 114 : item *Mayhoff qui et potu coni.* : in *codd. Caesarius coni. illitum.*

^a There is much to be said for the old emendation of Caesarius, "applied locally."

of the colon in either water or wine, for troubles of the liver and kidneys, excessive bile, and dropsy, either by itself or with wormwood. It checks excessive attacks of menstruation.

LXXX. The root of the plant that in the same place I have called phu is given, either in drink pounded, or else boiled, for suffocation of the womb, and for pains also of the chest or side. It is an emmenagogue and is taken with wine.

LXXXI. Saffron does not blend well with honey or with anything sweet, but it does so very easily with wine or water. It is very useful in medicine, and is kept in a horn box. It disperses all inflammations, but especially those of the eyes, taken internally^a with egg; suffocation of the womb as well, and ulcerations of the throat,^b chest, kidneys, liver, lungs and bladder, being very useful indeed for inflammation in particular of these organs,^c as also for cough and for pleurisy. It removes itching also, and promotes urination. Those who take saffron first will not feel after-effects of wine and will become intoxicated with difficulty. Chaplets too made of it alleviate intoxication. It induces sleep, has a gentle action on the head,^d and is an aphrodisiac. Its blossom, with Cimolian chalk, is used as an application for erysipelas. The plant itself is used as an ingredient in numerous medicines, and there is one eye-salve to which it has actually given its name.

^b Possibly "stomach." *Stomachus* included all the alimentary canal, and it is sometimes difficult to decide which part of it is referred to.

^c *Earum* agrees grammatically with the last item in the series, *vesicarum*, but in sense includes all the preceding items.

^d Apparently much the same as *purgat*, "clears the head."

PLINY : NATURAL HISTORY

- 139 LXXXII. Faex quoque expressi unguento crocino quod crocomagma appellant habet suas utilitates contra suffusiones oculorum, urinas. magis exalfacit quam crocum ipsum. optimum quod gustatu salivam dentesque maxime inficit.
- 140 LXXXIII. Iris rufa melior quam candida. infantibus eam circumligari salutare est, dentientibus praecipue et tussientibus taeniarumve vitio laborantibus instillari. ceteri effectus eius non multum a melle differunt. ulcera purgat capitis, praecipue suppurationes veteres. alvum solvit duabus drachmis cum melle, tussim, tormina, inflationes
- 141 pota, lienes ex aceto. contra serpentium et araneorum morsus ex posca valet, contra scorpiones duarum drachmarum pondere in pane vel aqua sumitur, contra canum morsus ex oleo inponitur et contra perfrictiones. sic et nervorum doloribus, lumbis vero et conxendicibus cum resina inlinitur. vis ei concalfactoria. naribus subducta sternu-
- 142 menta movet caputque purgat. dolori capitis cum cotoneis malis aut strutheis inlinitur. crapulas quoque et orthopnoeas discutit. vomitiones ciet duobus obolis sumpta. ossa fracta extrahit, inposita cum melle. ad paronychia farina eius utuntur, in vino ad clavos et verrucas, triduoque non solvitur.

^a Dioscorides (I. 27) has: τὸ δὲ κροκόμαγμα γίνεται ἐκ τοῦ κροκίνου μύρου τῶν ἀρωμάτων ἐκπιεσθέντων καὶ ἀναπλασθέντων. Crocomagma therefore was the residue from a refining of saffron juice, not "the residuum of saffron after the extraction of the oil" (Lewis and Short). Cf. Bohn translation: "The lees of the extract of saffron, employed in the unguent known as 'crocomagma'." I have tried to reconcile Pliny and Dioscorides by taking *unguento crocino* as ablative dependent upon *expressi*, and *quod* as relative to *faex* but attracted to

LXXXII. The lees too of the saffron extracted from saffron juice,^a which is called *crocomagma*, have their own uses for cataract and strangury. It is more warming than saffron itself. The best kind is that which, when put in the mouth, stains with the truest saffron colour the saliva and the teeth.

LXXXIII. The red iris is better than the white one. It conduces to the health of babies to have this tied on them, especially when they are teething or suffering from cough, and to inject it into those troubled with tape-worms. Its other properties are not much different from those of honey. It cleanses sores on the head, especially abscesses of long standing. Taken in doses of two drachmae with honey it relaxes the bowels; taken in drink it relieves cough, griping and flatulence, in vinegar, complaints of the spleen. In vinegar and water it is an antidote against the bites of snakes and of spiders; against stings of scorpions two drachmae by weight are taken in bread or water; for dog-bites and abrasions it is applied in oil. So prepared it is also applied to aching sinews, but for lumbago and sciatica resin is added. Its nature is warming. Snuffed up through the nostrils it promotes sneezing and clears the head. For headache it is applied with quinces or with sparrow-apples. It dispels also the after-effects of wine and orthopnoea. Taken in doses of two oboli it acts as an emetic. Applied with honey it draws out splinters of broken bone. For whitlows its meal is used, wine being added for corns and warts, the plaster not being removed for three

*Medical uses
of the iris.*

the gender of *crocomagma*. The Bohn version makes *unguento crocino* dative and *quod* as relative to *crocomagma*, and it must be confessed that the Latin may be thus construed.

PLINY : NATURAL HISTORY

- halitus oris commanducata abolet alarumque vitia. suco duritias omnes emollit. somnum conciliat, sed genituram consumit. sedis rimas et condylomata
- 143 omniaque in corpore excrescentia sanat. sunt qui silvestrem xyrim vocent. strumas haec vel panos vel inguina discutit. praecipitur ut sinistra manu ad hos eruatur colligentesque dicant cuius hominis
- 144 vitii¹ causa eximant. scelus herbariorum aperietur et in hac mentione. partem eius servant et quarundam aliarum herbarum, sicuti plantaginis, et si parum mercedis tulisse se arbitrantur rursusque opus quaerunt, partem eam quam servavere eodem loco infodiunt, credo, ut vitia quae sanaverint faciant rebellare. salicuncae radix in vino decocta sistit vomitiones, corroborat stomachum.
- 145 LXXXIV. Polio Musaeus et Hesiodus perungui iubent dignationis gloriaeque avidos, polium tractari, coli, polium contra venena haberi, contra serpentes substerni, uri, in vino decoqui recens vel aridum, inlinique² vel potari. medici splenicis propinant ex aceto, morbo regio in vino, et hydropicis incipientibus in vino decoctum, vulneribus quoque sic
- 146 inlinunt. secundas mulierum partusque emortuos pellit, item dolores corporis. vesicas inanit, epiphoris inlinitur. nec magis alia herba convenit

¹ vitii¹ *Sillig Mayhoff*: utique *cum codd. Detlefsen*.

² inlinique vel potari. medici *Mayhoff*: portari (*aut potari*) *post uri codd.*

* Celsus VI. 18, 8 says that a condyloma is a small tumour (*tuberculum*) due to inflammation. See also p. 384, note b.

^b Does not this belong to chapter LXXVII of this book?

days. Chewed it sweetens foul breath and offensive armpits. Its juice softens all indurations. It induces sleep, but dries up the semen. It heals cracks in the anus and condylomata,^a and all excrescences on the body. Some authorities call the wild variety xyris. This disperses scrofulous sores, superficial abscesses and swellings in the groin. It is recommended that for these purposes it should be pulled up with the left hand, and the gatherers should utter the name of the patient and of the complaint for whose sake they are pulling it. While speaking of this plant also I will make known the dishonesty of herbalists. They keep back a part of it and of certain other plants, such as the plantain. If they think their pay insufficient and look for further employment, they bury in the same place the part they kept back, I suppose to make the complaints they have cured break out again. The root of Celtic valerian (?) boiled down in wine checks vomiting and strengthens the stomach.^b

LXXXIV. Musaeus and Hesiod bid those who are ambitious for honour and glory to rub themselves over with hylwort, and for hylwort to be handled, cultivated, carried on the person to neutralize poisons, to be placed under bedclothes to keep away snakes, to be burnt, to be boiled down, fresh or dry, in wine, and to be used as liniment or taken by the mouth. Physicians prescribe hylwort for splenic complaints in vinegar, for jaundice in wine, for incipient dropsy boiled down in wine, and so prepared also as a liniment for wounds. It brings away the after-birth and the dead foetus; it relieves pains of the body and empties the bladder; it is applied as ointment for fluxes from the eyes. No other herb makes a more

*Uses of
hylwort.*

PLINY: NATURAL HISTORY

- medicamento quod alexipharmakon vocant. stomacho tamen inutile esse caputque eo impleri et
 147 abortum fieri puto. aliqui negant et religionem addunt, ubi inventum sit, protinus adalligandum contra oculorum suffusiones, cavendumque ne terram attingat. hi et folia eius thymo similia tradunt, nisi quod molliora sunt et lanatiore canitie. cum ruta silvestri et si teratur ex aqua caelesti, aspidas mitigare dicitur, et non secus atque cyanus¹ adstringit et cohibet vulnera prohibetque serpere.
- 148 LXXXV. Holochrysos medetur stranguriae in vino, et oculorum epiphoris inlitu,² cum faece vero vini cremata et polenta lichenas emendat. chrysocomes radix calfacit et adstringit. datur potui ad iocinerum vitia, item pulmonum, vulvae dolores in aqua mulsa decocta. ciet menstrua, et si cruda detur, hydropicorum aquam.
- 149 LXXXVI. Melissophyllo sive melittaena si perunguntur alvi, non fugient apes, nullo enim magis flore gaudent. scopis eius examina facillime continentur. idem praesentissimum est contra ictus earum vesparumque et similium, sicut araneorum,

¹ cyanus cum codd. *Detlefsen*: cytinus *Barbarus*, *Mayhoff*.

² inlitu *Mayhoff*: inlitum (inlitus, inlita) codd. *plurimi et edd.*: inlitū unus cod.

^a I.e. "the warder-off of poison."

^b I take the *et* to be the postponed *et* common in Pliny, though here it is unusually late. "With wild rue, and if it be pounded in rain-water," would make odd sense.

^c There is much to be said for the old conjecture *cytinus*, accepted by *Mayhoff*, calyx of the pomegranate. Cf. XXIII. § 111: *iidem cytini siccati tritique carnes excrescentes cohibent*.

^d The sense is clear, although the reading, owing to some uncertainty about the gender of *holochrysos*, is very doubtful.

suitable ingredient for the antidote called alexipharmac^a. It is, however, injurious in my opinion to the stomach, and makes the head stuffy, besides causing miscarriage. Some deny this, and go on to add the superstition that, when found, it should for cataract at once be tied round the neck, care being taken not to let it touch the ground. The same state that its leaves resemble those of thyme, except that they are softer and of a more downy whiteness. If too ^b it be pounded with wild rue in rain water it is said to lessen the danger of asp bites; and as well as the blue cornflower ^c it binds and closes wounds, preventing them from spreading.

LXXXV. Holochrysos taken in wine cures strangury, and applied as liniment ^d fluxes from the eyes; with burnt lees of wine and pearl barley it removes lichens. The root of chrysocome is warming and astringent. It is given in drink for complaints of liver and lungs, while a decoction in hydromel is prescribed for pains in the womb. It promotes menstruation, and if given raw reduces ^e the water of dropsy. *Use of holochrysos.*

LXXXVI. If the hives are rubbed over with melissophyllum (balm), sometimes called melittaena, the bees will not fly away, for no flower gives them greater pleasure. With besoms made of this plant swarms are controlled with the greatest ease. It is also a most effective remedy for the stings of bees, wasps and similar insects, such as spiders and also *Of melissophyllum.*

The *inlitū* of d points to *inlitu* taken to be *inlitum*, the reading of V and G. For *illitu* see XXVI. § 151.

* A violent zeugma, for a verb must be understood which is the opposite of *ciet* in meaning. See J. Müller *Der Stil des älteren Plinius*, § 33, p. 89.

PLINY : NATURAL HISTORY

- item scorpionum, item contra volvarum strangu-
 150 lationes addito nitro, contra tormina e vino. folia
 eius strumis inlinuntur et sedis vitiis cum sale.
 decoctae sucus feminas purgat et inflammationes
 discutit et ulcera sanat. articulares morbos sedat
 canisque morsus. prodest dysintericis veteribus et
 coeliacis, orthopnoicis, lienibus, ulceribus thoracis.
 caligines oculorum suco cum melle inungi eximium
 habetur.
- 151 LXXXVII. Melilotos quoque oculis medetur cum
 luteo ovi aut lini semine. maxillarum quoque
 dolores lenit et capitis cum rosaceo, item aurium e
 passo quaeque in manibus intumescant vel erumpant,
 stomachi dolores in vino decocta vel cruda tritaque.
 idem effectus et ad vulvas, ad testes vero et sedem
 prociduum quaeque et alia ibi sint vitia recente ex
 aqua decocta ¹ vel ex passo. adiecto rosaceo inlinuntur
 ad carcinomata. defervescit in vino dulci. pe-
 culiariter et contra meliceridas efficax.
- 152 LXXXVIII. Trifolium scio credi praevalere contra
 serpentium et scorpionum ictus, ex vino aut posca
 seminis granis xx potis, vel foliis et tota herba
 decocta, serpentesque numquam in trifolio aspici,
 praeterea a celebratis auctoribus contra omnia
 venena pro antidoto sufficere xxv grana eius quod

¹ recente ex aqua decocta *secutus Ianum Deilefsen* : recens
vulg. : decoctam aut decocta *codd.* : recentem ex aqua
 decoctam *Mayhoff*, qui lacunam (iubent inlini) ante recentem
 indicat.

^a So named apparently from the honey-coloured pus.

^b See § 54 of this book.

scorpions; also with the addition of soda for suffocation of the womb, and in wine for griping of the bowels. Its leaves are applied to scrofulous sores, and with salt for affections of the anus. The juice of the boiled plant promotes menstruation, removes inflammations and heals sores. It alleviates diseases of the joints and the bites of dogs. It is beneficial to sufferers from chronic dysentery and to coeliac patients, asthmatics, and patients with splenic troubles or ulcers on the chest. It is thought excellent treatment to anoint weak eyes with its juice mixed with honey.

LXXXVII. Melilot too is healing to the eyes *of melilot.* when mixed with egg-yolk or linseed. With rose oil it also relieves pain in the jaws or head, and with raisin wine ear-ache and swellings or eruptions on the hands; boiled down in wine or pounded and raw it is good for pains in the stomach. It has the same action on the womb; for the testes, however, prolapsus of the anus and other complaints of those parts it should be freshly gathered and boiled down in water or in raisin wine. With the addition of rose oil it makes an ointment for carcinoma. It is thoroughly boiled down in sweet wine, and is particularly effective in the treatment of the tumours called melicerides.^a

LXXXVIII. I know it is believed that trefoil is an *of trefoil* antidote for the bite of snakes and scorpions, twenty grains of the seed being taken in a drink of wine or of vinegar and water, or leaves with the whole plant are boiled down to make a decoction; that snakes too are never seen in trefoil; I know too that it is reported by famous authorities that twenty-five grains of the kind of trefoil I have called minyanthes^b

PLINY: NATURAL HISTORY

- minyanthes ex eo appellavimus tradi, multa alia
 153 praeterea in remediis eius adscribi. sed me contra
 sententias eorum gravissimi viri auctoritas movet,
 Sophocles enim poeta venenatum id dicit, Simos
 quoque ex medicis, decocti aut contriti sucum
 infusum corpori easdem uredines facere quas si
 percussis a serpente inponatur. ergo non aliter
 utendum eo quam contra venena censuerim. for-
 tassiss enim et his venenis inter se contraria sit natura
 sicut multis aliis. item animadverto semen eius
 cuius minima sint folia utile esse ad custodiendam
 mulierum cutis gratiam in facie inlitum.
- 154 LXXXIX. Thymum colligi oportet in flore, et in
 umbra siccari. duo autem sunt genera eius: can-
 didum radice lignosa, in collibus nascens, quod et
 praefertur, alterum nigrius florisque nigri. utraque
 oculorum claritati multum conferre existimantur et
 in cibo et in medicamentis, item diutinae tussi,
 155 ecligmate faciles excreationes facere cum aceto et
 sale, sanguinem concreescere non pati e melle, longas
 faucium destillationes extra inlita cum sinapi ex-
 tenuare, item stomachi et ventris vitia. modicis
 tamen utendum est, quoniam excalfaciunt, qua vi
 sistunt alvum, quae si exulcerata sit, denarii pondus

^a It is not clear whether this refers to minyanthes only or to trefoil generally.

^b Or, "these poisons have a mutually counteracting quality, as many other things have."

serve as an antidote for all poisons, and that many other virtues besides are attributed to it as a remedy. But I am led to oppose their views by the authority of a very reliable man; for the poet Sophocles asserts that it is^a poisonous, as does Simos also among the physicians, saying that the juice of the decocted or pounded plant, when poured upon the body, produces the same sensations of burning as those felt by persons bitten by a serpent, when this plant is applied to the wound. Wherefore I should be of opinion that it should not be used otherwise than as a counter-poison. For perhaps this is one of the many cases where one poison is poisonous to other poisons.^b I have likewise noted that the seed of that trefoil the leaves of which are very small is useful, when applied as face-ointment, for preserving the loveliness of women's skin.

LXXXIX. Thyme ought to be gathered while it *Of thyme.* is in blossom, and to be dried in the shade. There are two kinds of thyme:—one white, with a wood-like root, growing on hills and also the more highly valued; the other kind is darker and with a dark flower. Both kinds are supposed to be very beneficial for brightening the vision, whether taken as food or used in medicines, also for a chronic cough, to ease expectoration when used as an electuary with vinegar and salt, to prevent the blood from congealing when taken with honey, to relieve, applied externally with mustard, chronic catarrh of the throat, and also complaints of the stomach and bowels. They should be used, however, in moderation, since they are heating, and because of this property they are astringent to the bowels; should these become ulcerated, a denarius of thyme should

PLINY : NATURAL HISTORY

- in sextarium aceti et mellis addi oportet, item si lateris dolor sit, aut inter scapulas aut in thorace. praecordiis medentur ex aceto cum melle, quae potio datur et in alienatione mentis ac melancholicis.
- 156 datur et comitialibus quos correptos olfactu excitat thymum. aiunt et dormire eos oportere in molli thymo. prodest et orthopnoicis et anhelatoribus mulierumque mensibus retardatis, vel si emortui sint in utero partus, decoctum in aqua ad tertias, et viris vero contra inflationes cum melle et aceto, et si venter turgeat testesve, aut si vesicae dolor exigat.
- 157 e vino tumores et impetus inpositum tollit, item cum aceto callum et verrucas. coxendicibus inponitur cum vino, articulariis morbis et luxatis tritum ac lanae inspersum ex oleo, ambustis cum adipe suillo. dant et potionem articulariis novis¹ trium obolorum pondere in tribus cyathis aceti et mellis, et in fastidio tritum cum sale.
- 158 XC. Hemerocalles pallidum e viridi et molle folium habet, radice odorata, quae bulbosa cum melle inposita ventri aquas pellit et sanguinem etiam inutilem. folia epiphoris oculorum mammarumque post partum doloribus inlinuntur.
- 159 XCI. Helenium ab Helena, ut diximus, natum favere creditur formae, cutem mulierum in facie reliquoque corpore nutrire incorruptam. praeterea

¹ novis *Sillig et Dellefsen secuti Gronovium* : bonis codd. : potioni in articulariis morbis *Mayhoff*.

^a See p. xiv.

^b *Impetus*, which with a genitive means attack, paroxysm, when used absolutely seems to denote an inflammation or inflamed swelling. See a fuller note on XXII. § 122, p. 382.

^c Probably, extravasated.

^d See § 59 of this book.

be added to a sextarius of vinegar and honey, and the same for pain in the side, or between the shoulder-blades, or in the chest. They cure troubles of the hypochondria, taken in vinegar and honey, which draught is also given in cases of aberration of mind or of melancholy.^a Thyme is also administered to epileptics, who when attacked by a fit are revived by its smell. It is said too that epileptics should sleep on soft thyme. It is good also for asthma, difficult breathing, and delayed menstruation; or if the embryo in the womb be dead, thyme boiled down in water to one third proves useful, as thyme moreover does to men also, if taken with honey and vinegar, for flatulence, for swellings of the belly or testes, or for maddening pain in the bladder. An application in wine removes tumours and inflammations,^b and in vinegar callosities and warts. It is applied with wine for sciatica; pounded and sprinkled in oil on wool it is used for affections of the joints and for sprains, with lard it is applied to burns. It is also administered as a draught in the early stages of affections of the joints, three oboli of thyme in three cyathi of vinegar and honey; pounded, with the addition of salt, it is used for loss of appetite.

XC. Hemerocallis has a soft leaf of a pale green, *Other plant* and a scented bulbous root, which applied with honey to the belly drives out watery humours and also harmful blood. The leaves are applied for fluxes of the eyes and for pains in the breasts after childbirth.

XCI. Helenium, which had its origin, as I have said,^c in the tears of Helen, is believed to preserve physical charm, and to keep unimpaired the fresh complexion of our women, whether of the face or of the rest of the body. Moreover, it is supposed that

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putant usu eius quandam ita gratiam his veneremque conciliari. adtribuunt et hilaritatis effectum eidem potae in vino eumque quem habuerit nepenthes illud praedicatum ab Homero, quo tristitia omnis aboleretur. est autem suci praedulcis. prodest et orthopnoicis radix eius in aqua ieiunis pota. est autem candida intus et dulcis. bibitur et contra serpentium ictus ex vino. mures quoque contrita dicitur necare.

- 160 XCII. Habrotonum duorum traditur generum, campestre ac montanum. hoc feminam, illud marem intellegi volunt. amaritudo absinthi in utroque. Siculum laudatissimum, dein Galaticum. usus et foliis, sed maior semini ad excalfaciendum, ideo nervis utile, tussi, orthopnoeae, convulsis, ruptis, lumbis, urinae angustis. datur bibendum manualibus fasciculis decoctis ad tertias partes; ex his
161 quaternis cyathis bibitur. datur et semen tusum in aqua drachmae pondere. prodest et vulvae. concoquit panos cum farina hordeacia et oculorum inflammationi inlinitur cotoneo malo cocto. ser-
162 pentes fugat. contra ictus earum bibitur cum vino inliniturque, efficacissimum contra ea quorum veneno tremores et frigus accidunt, ut scorpionum et phalangiorum, et contra venena alia pota prodest et quoquo modo argentibus et ad extrahenda ea¹ quae

¹ argentibus et ad extrahenda ea *Deilefsen* : argentibus. vis ei et extrahendi ea *Mayhoff* : est et, est, et, et ad et extrahendi *codd.*

^a *Odyssey* IV. 221 ff.

^b The translation makes *effectum* the antecedent to *quo* and *aboleretur* to be final or consecutive. It is also possible to translate, "by which all sorrow was banished," when the antecedent would be *nepenthes* and the subjunctive due to virtual oratio obliqua.

by its use they gain a kind of attractiveness and sex-appeal. To this plant when taken in wine is attributed the power of stimulating gaiety, the power possessed by the famous nepenthes extolled by Homer ^a of banishing all sorrow.^b It also has a very sweet juice. The root of it, taken in water fasting, is good for asthma; inside it is white and sweet. It is also taken in wine for snake bites. Pounded it is said further to kill mice.

XCII. Of southernwood authorities mention two kinds: the field and the mountain. The latter, they would have us understand, is female, the former male; both are as bitter as wormwood. The Sicilian is the most highly praised, next comes that of Galatia. While some use is made of the leaves, the seed is more useful for warming, for which reason it is good for sinews, cough, asthma, convulsions, ruptures, lumbago and strangury. Some handfuls are boiled down to one third, and given to drink in doses of four cyathi. The pounded seed also is given in water, a drachma at a time. It is also beneficial to the uterus. With barley meal it brings to a head superficial abscesses, and it is applied as a liniment for inflammation of the eyes, a quince being boiled with it.^c It keeps snakes away, and for their bites is either taken or applied with wine, being very effective against those creatures whose venom causes shivering and chills, scorpions for instance and poisonous spiders; taken in drink it is good for other poisons, taken in any way it is good for chill fits, and

Uses of
southern-
wood.

^c A most odd ablative absolute, the sense however being clear. The Bohn translation reads as though the original were *cum cotoneo malo coctum*.

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inhaereant corporibus. pellit et interaneorum mala. ramo eius, si subiciatur pulvino, venerem stimulari aiunt, efficacissimamque esse herbam contra omnia veneficia quibus coitus inhibeat.

- 163 XCIII. Leucanthemum suspiriosis medetur duabus partibus aceti permixtum. sampsuchum sive amaracum in Cypro laudatissimum et odoratissimum scorpionibus adversatur ex aceto ac sale inlitum. menstruis quoque multum confert inpositum. minor eidem poto vis. cohibet et oculorum epiphoras cum polenta. sucus decocti tormina discutit. et urinis et hydropicis utile. movet et aridum sternumenta. fit ex eo et oleum quod sampsuchinum vocatur aut amaracinum ad excalfaciendos molliendosque nervos, et vulvas calfacit. et folia suggillatis cum melle et luxatis cum cera prosunt.

- 164 XCIV. Anemonas coronarias tantum diximus, nunc reddemus et medicas. sunt qui phrenion vocent. duo eius genera: prima silvestris, altera cultis nascens, utraque sabulosis. huius plures species, aut enim phoenicium florem habet, quae et copiosissima est, aut purpureum aut lacteum. harum trium folia apio similia sunt, nec temere semipedem
165 altitudine excedunt, cacumine asparagi. flos num-

^a *Pellit* suggests that the *mala* referred to are the *animalia* of XX. §§ 54, 218, but perhaps other intruders are included.

^b The Bohn translation takes this to refer to pessaries. It may do so, but I cannot find examples of *impono* (which means to place *on* rather than *in*) in this connection. The word generally used is *adpono*. *Imponere* is to apply as a plaster, *inlinere* to apply as liniment.

^c See §§ 64 ff. of this book.

for withdrawing substances embedded in the flesh. It also forces out noxious things ^a from the intestines. They say that a spray of it, laid under the pillow, acts as an aphrodisiac, and that the plant is a most effective countercheck of all magic potions given to produce sexual impotence.

XCIII. *Leucanthemum* mixed with twice the quantity of vinegar is beneficial to asthmatics. *Sampsuchum* (otherwise *amaracum*, sweet marjoram) of which the most valued, and the most fragrant, comes from Cyprus, counteracts the stings of scorpions, if applied in vinegar and salt. An application ^b is also very beneficial for irregular menstruation. This plant has less efficacy when taken in drink. With pearl barley it also checks fluxes from the eyes. The juice of the boiled plant relieves gripings. The plant is useful for strangury and dropsy, and in a dry state excites sneezing. There is also made from it an oil, called *sampsuchinum* or *amaracinum*, used for warming and softening the sinews, which also warms the uterus. The leaves too are good with honey for bruises and with wax for sprains. *And of other plants.*

XCIV. Up to the present ^c I have spoken only of the *anemone* used for chaplets; I shall now describe the kinds used in medicine. There are some who use the name *phrenion*. There are two kinds of it: one is wild, and the other grows on cultivated ground, though both prefer a sandy soil. Of the cultivated *anemone* there are several species; for it has either a scarlet flower—this is also the most plentiful—or a purple one, or one the colour of milk. The leaves of all these are like the leaves of parsley, and rarely does the plant exceed half a foot in height, the head resembling that of *asparagus*. *Uses of anemones.*

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quam se aperit nisi vento spirante, unde et nomen accepere. silvestri amplitudo maior latioribusque¹ foliis, flore phoenicio. hanc errore ducti argemonen putant multi, alii rursus papaver quod rheoan vocavimus. sed distinctio magna, quod utraque haec postea florent, nec aut sucum illarum anemonae reddunt aut calyces habent nec nisi asparagi cacumen. prosunt anemonae capitis doloribus et inflammationibus, vulvis mulierum, lacti quoque.² et menstrua cient cum tisana sumptae aut vellere adpositae. radix commanducata pituitam trahit, dentes sanat, decocta oculorum epiphoras et cicatrices. Magi occultum³ quiddam⁴ iis tribuere, quae⁵ primum aspiciatur eo⁶ anno tolli iubentes dicique colligi eam tertianis et quartanis remedio, postea adligari florem panno russeo et in umbra adservari, ita, cum opus sit, adalligari. quae ex his phoenicium florem habet radice contrita cuicumque animalium inposita ulcus facit styptica vi. et ideo expurgandis ulceribus adhibetur.

¹ latioribusque *codd.*: latioribus durioribusque *coll. Diosc. Mayhoff.*

² lacti quoque. et *codd.*, *Deilefsen*: lacte quoque et *coll. Diosc. Mayhoff.*

³ occultum *Mayhoff*: multum *Deilefsen.*

⁴ quiddam *multi codd. et Mayhoff*: quidem *vulg., Deilefsen.*

⁵ quae *secutus C. F. W. Muller, Mayhoff*: quam *codd.*

⁶ eo cum *codd., Mayhoff*: in *Urlichs, Deilefsen, codd.*

^a Derived from *ἄνεμος*, wind.

^b Dioscorides has (II. 176 Wellmann) τοῖς φύλλοις πλατυτέρα καὶ σκληροτέρα, so that Mayhoff's insertion of *durioribusque* ('and harder') may be correct.

^c XIX. 168.

^d Perhaps, corolla. However, anemones have no petals, only coloured sepals.

^e Dioscorides has: ἐσθιόμενα γάλα κατασπᾶ, ἐν προσθέτῳ δὲ ἔμμηνα ἄγει (II. 176). Mayhoff's emendation and punctuation

The flower never opens except when the wind is blowing, a fact to which it owes its name.^a The wild anemone is the larger, and its leaves are broader,^b the flower being scarlet. Many have been misled into identifying the wild anemone with the argemone, others again with the poppy that I have called rhoeas.^c But there is a great difference between them, because these two blossom after the anemone, which does not yield a juice like theirs, has not their calyx,^d and there is no likeness except the head like asparagus. Anemones are good for headache and inflammations, for uterine complaints and for lacteal troubles.^e They also promote menstruation when taken with barley water or used on a wool pessary. The root chewed brings away phlegm, is healing to the teeth,^f and when boiled down to fluxes of the eyes and to scars. The Magi have attributed to the anemones a kind of mystic potency, recommending that the plant which is first seen should be taken up in that year with the utterance that it is being gathered as a remedy for tertian and quartan agues; after this the blossoms must be wrapped up in ^g a red rag and kept in the shade, and so be used, should occasion arise, as an amulet. If the crushed root of the anemone bearing a scarlet flower be applied to the skin of any living creature, it produces a sore by reason of its astringent qualities, and for this reason it is employed for cleansing ulcerous sores.

are therefore attractive, especially as *lacte* accusative would naturally be changed to *lacti* by an ignorant scribe, and with the received punctuation *quoque* comes in with a jerk. The sense however is much the same either way.

^f Possibly, "cures toothache."

^g Or, "bound together with," unless we read, as Mayhoff suggests, *ligari*.

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- 167 XCV. *Oenanthe* herba nascitur in petris, folio pastinacae, radice magna, numerosa. caulis eius et folia cum melle ac vino nigro pota facilitatem pariendi praestant secundasque purgant, tussim e melle tollunt, urinam cient. radix et vesicae vitii medetur.
- 168 XCVI. *Heliochrysum* alii *chrysanthemon* vocant, ramulos habet candidos, folia subalbida, habrotono similia, ad solis repercussum aureae lucis in orbem veluti corymbis dependentibus, qui numquam marcescunt, qua de causa deos coronant illo, quod diligentissime servavit Ptolomaeus Aegypti rex. nascitur in frutectis. ciet urinas e vino pota et menses.
- 169 duritias et inflammationes discutit, ambustis cum melle inponitur. contra serpentium ictus et lumborum vitia bibitur. sanguinem concretum ventris aut vesicae absumit cum mulso. folia eius trita¹ trium obolorum pondere sistunt profluvia mulierum in vino albo. vestes tuetur odore non ineleganti.
- 170 XCVII. *Hyacinthus* in Gallia maxime provenit. hoc ibi fuco hyssginum tingunt. radix est bulbacea, mangonicis venaliciis pulchre nota, quae e vino dulci inlita pubertatem coerces et non patitur erumpere. torminibus et araneorum morsibus resistit. urinam impellit. contra serpentes et scorpiones morbumque regium semen eius cum habrotono datur.

¹ trita *omitt. nonnulli codd. et Detlefsen.*

^a ἐν πέτραις (Dioscorides III. 120). Perhaps, "on rocky soils."

^b Dioscorides has corresponding to Pliny's *numerosa κεφαλὰς ἔχουσαν πλείονας*.

^c A deep-red dye, to which apparently shades were given by adding other ingredients. The hyacinth meant is *Scilla bifolia*.

XCV. The plant oenanthe grows on rocks,^a and *Oenanthe.* has a leaf like that of parsnip and a large root, with several heads.^b Its stem and leaves taken with honey and dark wine make childbirth easy and bring away the after-birth; taken in honey they are a cure for coughs, and also diuretic. The root also cures complaints of the bladder.

XCVI. Heliochrysus is called by some chrysanthemon. It has sprigs of a shining white, and leaves of a dull whitish colour, like those of southernwood, with as it were clusters hanging down all round it, which glisten like gold when reflecting the light of the sun, and never fade. For this reason they make chaplets of it for the gods, a custom which Ptolemy king of Egypt very faithfully observed. It grows in shrubberies. Taken in wine it is diuretic and promotes menstruation. It disperses indurations and inflammations; for burns it is applied with honey. For snake bites and lumbago it is taken in drink. With honey wine it removes congealed blood in the belly or bladder. Three oboli by weight of its leaves, pounded and taken in white wine, check excessive menstruation. It protects clothes by its smell, which however is not unpleasant.

XCVII. The hyacinth grows chiefly in Gaul. *Uses of hyacinth.* There they use it to impart a shade to the dye hyssinum.^c The root is bulbous, and well known to slave-dealers, for applied in sweet wine it checks the signs of puberty, and does not let them develop. It relieves colic and counteracts the bites of spiders. It is diuretic. For snake bites, scorpion stings and jaundice its seed is given mixed with southernwood.

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- 171 XCVIII. *Lychnis* quoque *flammea* illa adversus serpentes et scorpiones et crabrones similiaque bibitur e vino semine trito. *silvestris* eadem stomacho inutilis. alvum solvit, ad detrahendam bilem efficacissima duabus drachmis, scorpionibus tam contraria ut omnino visa ea torpescant. radicem eius *Asiani* boliten vocant, qua adalligata oculo albugines tolli dicuntur.
- 172 XCIX. Et *vicapervica* sive *chamaedaphne* arida tusa hydropicis datur in aqua cocleari mensura, celerrimeque reddunt aquam. eadem decocta in cinere sparsa vino tumores siccant. auribus suco medetur. alvis¹ inposita plurimum prodesse dicitur.
- 173 C. *Rusci* radix decocta bibitur alternis diebus in calculorum validudine et tortuosiore urina vel cruenta. radicem pridie erui oportet, postero mane decoqui, ex eo sextarium vini cyathis duobus misceri. sunt qui et crudam radicem tritam ex aqua bibant, et in totum ad virilia cauliculis eius ex aceto tritis nihil utilius putant.
- 174 CI. *Batis* quoque alvum mollit. inlinitur podagricis cruda et contusa. acinon et coronarum causa et ciborum *Aegyptii* serunt, eademque erat quae oci-

¹ alvis *Barbarus*: alvinis fere omnes codd. et *Dellefsen*: alvi vitiis *Mayhoff*.

^a So the order of words seems to indicate. But *oculo* might be taken with *tolli*: "if it be tied on as an amulet, white films are said to be removed from the eye."

^b It is not known for certain what *albugo* was. It is a word found apparently only in Pliny. See p. ix.

XCVIII. The seed of lychnis too, that flame-*Of lychnis.*
coloured flower, is crushed and taken in wine for
snake bites and for the stings of scorpions, hornets
and the like. The wild variety of this plant is in-
jurious to the stomach. It loosens the bowels,
in doses of two drachmae, bringing away bile most
effectively, and is so hurtful to scorpions that the
mere sight of it sends them into complete stupor.
Its root is called bolites by the people of Asia; tied
over the eye ^a it is said to remove white film ^b on
the pupil.

XCIX. The *vicapervica*, otherwise *chamaedaphne*, *Of peri-*
dried and crushed is given in water for dropsy in *winkle.*
doses of a small spoonful, under which treatment the
patient very quickly loses the water. A decoction
of it in ash and sprinkled with wine dries tumours.
Its juice cures complaints of the ears. An applica-
tion to the belly is said to be very beneficial indeed
for diarrhoea.

C. A decoction of the root of butcher's broom is *Of butcher's*
given every other day for stone in the bladder, *broom.*
for painful urination, or for blood in the urine.
The root ought to be dug up on one day and the
decoction made on the morning of the next, a
sextarius of it being mixed with two cyathi of
wine. There are some also who take in water
the pounded root raw, and it is considered that
nothing is more wholly beneficial to the male
genitals than its small stalks pounded and used in
vinegar.

CI. *Batis* (sea-fennel) too relaxes the bowels. *Batis,*
Crushed up it is used raw as a liniment for gout. *actinos,*
The Egyptians sow *actinos* both for chaplets and for *colocasia.*
food; it would be just the same as *ocimum* were it

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mum, nisi hirsutior ramis ac foliis esset et admodum odorata. ciet et menses et urinas.

CII. Colocasia Glaucias acria corporis leniri putavit et stomachum iuvare.

- 175 CIII. Anthalii quod Aegyptii edunt nullum alium repperi usum. sed est herba anthyllum quam alii anthyllum vocant, duorum generum: foliis et ramis lenticulae similis, palmi altitudine, sabulosis apricis nascens, subsalsa gustanti. altera chamaepityi similis, brevior et hirsutior, purpurei floris, odore gravis, in saxosis nascens. prior vulvis aptissima, ex rosaceo ac lacte inposita, et vulneribus. bibitur in stranguria reniumque harenis tribus drachmis. altera bibitur in duritia vulvarum et in torminibus et in comitali morbo cum melle et aceto quattuor drachmis.

- 176 CIV. Parthenium alii leucanthes, alii amaracum vocant, Celsus apud nos perdicium et muralem. nascitur in hortorum saepibus, flore albo, odore mali, sapore amaro. ad insidendum decocta¹ in duritia vulvarum et inflammationibus, sicca cum melle et aceto inposita bilem detrahit atram. ob hoc contra vertigines utilis et calculosis. inlinitur

¹ decocta coni. Dellefsen: decoctae codd. et Mayhoff, qui post inflammationibus excidisse putat usus est.

* See Celsus II. 33. This perdicium is not the same as that mentioned in § 102 of this book.

^b Dioscorides (III. 138), τὸ δὲ μέσον μῆλινον ὁσμῇ ὑπόβρωμον, suggests that *malo* should be read for *mali*.

^c Dioscorides (*loc. cit.*), τὸ δὲ ἀφέψημα αὐτῆς ἐγκάθισμα ὑστέρας ἐσκληρωμένης. With Detlefsen's reading a suitable word or phrase (e.g., *utilis est*) must be supplied from *detrahit*, such zeugma being common in Pliny.

not for its rougher branches and leaves, and for its very strong smell. It is both an emmenagogue and diuretic.

CII. Colocasia, according to Glaucias, mellows the acrid humours of the body, and is beneficial to the stomach.

CIII. Anthalium is a food of the Egyptians, but *Anthalium.* I have been able to find no other use of it. There is however a plant called anthyllum by some and by others anthyllum, of which there are two kinds. One in leaves and branches is like the lentil, a palm in height, growing on sandy soils with plenty of sun, and slightly salt to the taste. The other kind is like the chamaepitys, but smaller and rougher, with a purple flower and a strong smell, and growing in rocky places. The former kind is very useful for uterine affections and for wounds, being applied with rose oil and milk. It is taken in drink for strangury and gravel of the kidneys in doses of three drachmae. The other kind is taken by the mouth with honey and vinegar in doses of four drachmae for indurations of the womb, gripings of the bowels, and epilepsy.

CIV. Parthenium is called leucanthes by some *Parthenium.* and amaracum by others. Celsus,^a among the Latin writers calls it perdicium and muralis. It grows in the hedges of gardens, and has a white flower, the smell of an apple ^b and a bitter taste. A decoction of this plant is used to make a sitz-bath for induration and inflammation of the womb;^c and the dried plant is applied with honey and vinegar to bring away black bile. For this reason it is good for dizziness and stone in the bladder. It is used as an application for erysipelas, and also with old axle-

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et sacro igni, item strumis cum axungia inveterata. Magi contra tertianas sinistra manu evelli eam iubent dicique cuius causa vellatur nec respicere, dein eius folium aegri linguae subicere ut mox in cyatho aquae devoretur.

- 177 CV. Trychno, quam quidam strychnon scripsere, utinam ne coronarii in Aegypto uterentur, quos invitat hederæ foliorum similitudo in duobus eius generibus, quorum alterum cui acini coccini granosi in folliculis, halicacabon vocant, alii callion, nostri autem vesicariam, quoniam vesicae et calculis prosit. frutex est surculosus verius quam herba, folliculis magnis latisque et turbinatis grandi intus acino, qui
178 maturescit Novembri mense. tertio folia sunt ocimi, minime diligenter demonstrando remedia, non venena, tractantibus, quippe insaniam facit parvo quoque suco. quamquam et Graeci auctores in iocum vertere. drachmae enim pondere lusum pudoris¹ gigni dixerunt species vanas² imaginesque conspicuas obversari demonstrantes, duplicatum hunc modum legitimam insaniam facere, quidquid
179 vero adiciatur ponderi repraesentari mortem. hoc est venenum quod innocentissimi auctores simpliciter dorycnion appellavere ab eo quod cuspides in proeliis tingerentur illo passim nascente. qui parcius insectabantur manicon nominavere, qui nequiter

¹ pudoris multi codd.; ceteri om.: furoris coni. Mayhoff.

² vanas: varias x.

^a Dioscorides has (IV. 73) *φαντασίας ἀπομελεῖν οὐκ ἀηδεῖς*. [Perhaps Pliny misheard *ἀηδεῖς* as *αἰδοῖας* or *αἰκεῖας*.] Mayhoff's conjecture would give "playful insanity." Theophrastus (*H.P.* IX. 11, § 6), *ὥστε παίζειν καὶ δοκεῖν ἐαυτῷ κάλλιστον εἶναι*, supports the vulgate.

^b The reading of x, "a medley of visions," is attractive.

grease for scrofulous sores. For tertian agues the Magi recommend us to gather it with the left hand without looking back, while saying for whose sake it is being gathered; then a leaf of it should be placed under the tongue of the patient to be swallowed presently in a cyathus of water.

CV. Trychnos, spelt by some strychnos, I wish *Trychnos*
the Egyptian florists did not use for their chaplets; *(Deadly*
they are tempted to do so by the resemblance of the *nightshade).*
leaves of both kinds to those of ivy. One of these kinds, bearing in a seed-bag scarlet berries with a stone in them, is called halicacabos, by others callion, and by our countrymen bladder-wort, because of its usefulness in cases of stone and other complaints of the bladder. It is a woody shrub rather than a plant, with large, broad, conical seed-bags, with a large stone inside, which ripens in November. A third kind has the leaves of basil, and should receive the briefest of descriptions from one who is dealing with remedies, not poisons, for a very small amount of the juice causes madness. Yet the Greek writers have actually made a jest of this property. For they have said that a dose of one drachma plays tricks with the sense of shame,^a speaking of hallucinations ^b and realistic visions; that a double dose causes downright insanity; any addition moreover to the dose bringing instant death. This is the poison which in their innocence very unsophisticated writers have called dorycnion ^c because spears before battle had their points dipped in it, as it grows everywhere. Those who censured it less severely gave it the name manicon; ^d those who from evil motives tried to keep its nature secret called it

^a From δόρυ = spear.

^d I.e., maddening.

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- occultabant erythron aut neurada aut, ut nonnulli,
 180 perisson, ne cavendi quidem causa curiosius dicen-
 dum. quin et alterum genus quod halicacabon
 vocant soporiferum est atque etiam opio velocius
 ad mortem, ab aliis morion, ab aliis moly appellatum,
 laudatum vero a Diocle et Evenore, Timaristo
 quidem etiam carmine, mira oblivione innocentiae,
 quippe praesentaneum remedium ad dentium mo-
 biles firmandos, si colluerentur halicacabo in vino.
 exceptionem addidere, ne diutius id fieret; de-
 lirationem enim gigni. non demonstranda¹ remedia
 quorum medicina maioris mali periculum adferat.
 181 commendetur ergo in cibis tertium genus licet ac
 praeferatur hortensiis saporibus et nil sit corporis
 malorum cui non salutare trychnos Xenocrates
 praedicet, non tamen auxilia eorum² tanti sunt ut
 ideo plura nos de iis commemorare fas putem,
 praesertim tanta copia innoxiorum medicaminum.
 182 halicacabi radicem bibunt qui vaticinari gallantesque
 vere ad confirmandas superstitiones aspici se volunt.
 remedio est—id enim libentius rettulerim—aqua
 copiosa mulsa calida potu. nec illud praeteribo,
 aspidum naturae halicacabum in tantum adversam
 ut radice eius propius admota soporetur illa sopore
 enecans vis earum. ergo trita ex oleo percussis
 auxiliatur.
 183 CVI. Corchorum Alexandrini cibi herba est con-
 volutis foliis ad similitudinem mori, praecordiis, ut

¹ gigni. non demonstranda. *Mayhoff*: gigni eo, demon-
 strando *Urlichs, Deilefsen*: eo et dem monstranda *codd.*

² eorum *codd. Deilefsen*: earum *coni. Mayhoff.*

^a Red.

^b As exciting the nerves.

^c Either (a) superfluous or (b) extraordinary.

^d Pimpernel.

erythron,^a or neuras,^b or (as a few did) perisson,^c but there is no need to go into more details even for the sake of giving a warning. There is besides another kind, with the name of halicacabos, which is soporific, and kills quicker even than opium, by some called morion and by others moly, yet praised by Diocles and Evenor, by Timaristus indeed even in verse, with a strange forgetfulness of harmless remedies, actually because it is, they say, a quick remedy for strengthening loose teeth to rinse them in wine and halicacabos. They added a proviso, that the rinsing must not go on too long, for delirium is caused thereby. Remedies should not be described the use of which involves the danger of a yet more serious evil. Accordingly, although a third kind of this plant is in favour as a food, and although its flavour is preferred to that of other garden produce, and although Xenocrates prescribes trychnos as being beneficial for every bodily ill, yet the genus is not so helpful that I consider it right on this account to give any more details, especially when the supply is so abundant of harmless remedies. The root of halicacabos is taken in drink by those who, to confirm superstitious notions, wish to play the inspired prophet, and to be publicly seen raving in unpretended madness. The remedy for it, which I am happier to mention, is a copious draught of hot hydromel. Nor will I pass over this: that halicacabos is so antipathetic to the nature of asps that if its root be brought near it stupefies that very power of theirs to kill by stupefaction. Therefore pounded and in oil it is a help to those who have been bitten.

CVI. Corchorum^d is a plant eaten at Alexandria. It has rolled up leaves, like those of the mulberry,

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ferunt, utilis alopeciiisque et lentigini. boum quoque scabiem celerrime sanari ea invenio, apud Nicandrum quidem et serpentium morsus, antequam floret.

- 184 CVII. Nec de cneco sive atractylide verbosius dici par esset, Aegyptia herba, ni magnum contra venenata animalia praeberet auxilium, item adversus fungos. constat a scorpione percussos, quamdiu teneant eam herbam, non sentire cruciatum.

CVIII. Et pesolutam Aegyptus in hortis serit, coronarum gratia. duo genera eius: femina ac mas, utraque subdita venerem inhiberi, virorum maxime, tradunt.

- 185 CIX. Et quoniam in mensuris quoque ac ponderibus crebro Graecis nominibus utendum est, interpretationem eorum semel hoc in loco ponemus: drachma Attica—fere enim Attica observatione medici utuntur—denarii argentei habet pondus, eademque vi obolos pondere efficit, obolus x chalcos. cyathus pendet per se drachmas x, cum acetabuli mensura dicitur, significat heminae quartam, id est drachmas xv. mna, quam nostri minam vocant, pendet drachmas Atticas c.

^a *Theriaca* 626.

and is beneficial, they say, to the hypochondria, for mange and for freckles. I find also that scab in cattle is very quickly healed by it, and that according to Nicander ^a the bites of snakes also, if gathered before it blossoms.

CVII. Nor would it be right to describe fully the *Cnecos*. *Cnecos*, otherwise *atractylis*, an Egyptian plant, were it not for the great help it affords against venomous creatures as well as against poisonous fungi. It is a well-known fact that so long as they hold this plant, those stung by scorpions feel no sharp pain.

CVIII. The Egyptians plant *pesoluta* too in their *Pesoluta*. gardens, using it for chaplets. There are two kinds, female and male; both, it is said, placed under the genitals, are antaphrodisiac, especially for men.

CIX. Since I have frequently to use Greek names *Weights and Measures*. when giving weights and measures, I will add at this place their equivalents, once and for all. The Attic drachma, for it is generally the Attic standard that physicians adopt, has the weight of a silver denarius, and the same makes six oboli, the obolus being ten chalci. The cyathus as a measure weighs ten drachmae; when the measure of an acetabulum is spoken of, it means the quarter of a hemina, that is fifteen drachmae. The mna, that our countrymen call the mina, weighs one hundred Attic drachmae.

BOOK XXII

LIBER XXII

I. Implesse poterant miraculum sui natura atque tellus reputanti vel prioris tantum voluminis dotes totque genera herbarum utilitatibus hominum aut voluptatibus genita. sed quanto plura restant quantoque mirabiliora inventu! illarum¹ enim maiore in parte cibi aut odoris decorisve commendatio ad numerosa experimenta duxit, reliquarum potentia adprobat nihil ab rerum natura sine aliqua occultiore causa gigni.

2 II. Equidem et formae gratia ritusque perpetui in corporibus suis aliquas exterarum gentium uti herbis quibusdam adverto animo. inlinunt certe aliis aliae faciem in populis barbarorum feminae, maresque etiam apud Dacos et Sarmatas corpora sua inscribunt. similis² plantagini glastum in Gallia vocatur, Britannorum coniuges nurusque toto corpore oblitae quibusdam in sacris nudae incedunt Aethiopum colorem imitantes.

3 III. Iam vero infici vestes scimus admirabili fuco, atque ut sileamus Galatiae, Africae, Lusitaniae e granis coccum imperatoriis dicatum paludamentis,

¹ illarum *Dellefsen e coni. Strackii*: illa *codd. et Mayhoff.*

² similis *codd. et Dellefsen*: simile *vulg.*: simili *Mayhoff.*
qui etiam glastum in Gallia vocatur in parenthesi ponit.

^a With Mayhoff's conjecture: "With a plant like the plantain—in Gaul it is called glastum—the wives, etc." *Glastum* is woad.

^b Probably a mistake of Pliny's for Gaul (*Γαλαρία*).

BOOK XXII

I. Nature and our earth might have filled the measure of our wonder at them in anyone who reviews even the preceding volume only, with all Nature's gifts in it, and all the kinds of plants created for the needs or pleasures of mankind. But how many more kinds remain, and how much more wonderful they are in their discovery! For of the plants mentioned already the greater number, owing to their excellence as food, perfume or ornament, have led to repeated experiments; of the rest it is their efficacy that proves that nothing is created by Nature without some more hidden reason than those just mentioned.

II. Now I notice that some foreign peoples use certain plants on their persons both to make themselves more handsome and also to keep up traditional custom. At any rate among barbarian tribes the women stain the face, using, some one plant and some another; and the men too among the Daci and the Sarmatae tattoo their own bodies. In Gaul there is a plant like the plantain, called glastum;^a with it the wives of the Britons, and their daughters-in-law, stain all the body, and at certain religious ceremonies march along naked, with a colour resembling that of Ethiopians.

III. Moreover we know that clothes are dyed ^{Vegetable} ^{dyes.} with a wonderful dye from a plant, and, to say nothing of the fact that, of the berries of Galatia,^b Africa, and Lusitania, the "coccum" is specially re-

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transalpina Gallia herbis Tyria atque¹ conchyliatinguit et omnes alios colores. nec quaerit in profundis murices, seque obiciendo escam, dum praeripit, beluis marinis, intacta etiam ancoris scrutatur vada, ut inveniat per quod facilius matrona adultero
4 placeat, corruptor insidiatur nuptae. stans et in sicco carpit quo frugem modo, sed culpant ablui usu, alioqui fulgentius instrui poterat luxuria, certe innocentius. non est nunc propositum ista con-
sectari, nec omitemus² ut subiciendo viliora luxuriam utilitate³ circumscribamus dicturi et alias herbis tinguere parietes nec lapide pingi.⁴ nec tinguendi
tamen rationem omissemus, si umquam ea liberal-
5 ium artium fuisset. interim fortius agetur, auctori-
tasque quanta debet etiam surdis hoc est ignobilibus herbis perhibebitur, siquidem auctores imperii Ro-
mani conditoresque immensum quiddam et hinc sumpserunt, quoniam non aliunde sagmina in remediis publicis fuere et in sacris legationibusque verbenae.

¹ atque] aequae coni. Warmington.

² nec omitemus cum codd. Ditlefsen: nec commitemus Mayhoff.

³ viliora . . . utilitate Mayhoff: utiliora . . . vilitate Ditlefsen.

⁴ parietes nec pingi lapide Mayhoff: lapides, parietes pingi Ditlefsen.

^a In reality the *coccum* was the kermes insect, and not a plant-product.

^b As "Tyrian purple" and "oyster purple" are practically the same things, Warmington for *atque* suggests *aeque*, "Tyrian oyster-purple just as well as it can all other colours."

^c Ditlefsen's readings would give: "so that I may, by suggesting more useful materials, curb luxury by cheapening it, as elsewhere I shall tell how stones are dyed and walls painted." With Mayhoff's we must translate: "and I shall

BOOK XXII. III. 3-5

served^a to colour the military cloaks of our generals, Transalpine Gaul can produce with vegetable dyes Tyrian purple, oyster purple^b and all other colours. To get these nobody seeks the murex oyster in the depths, offering his person as bait to sea monsters while he hastens to snatch his booty, and exploring a bottom that no anchor yet has touched, merely to discover the means for a matron to charm her paramour more easily and for a seducer to ensnare another's wife. There one stands on land to harvest dyes as we harvest crops; and though there is a complaint that the dye washes out with use, except for this defect luxury could have bedecked itself in brighter colours, and certainly with less risk to life. It is not my intention now to treat this subject fully, but I shall not pass it over entirely, so that I may, by suggesting cheaper materials, curb luxury by expediency, and on another occasion I shall tell how walls are dyed instead of being painted in mosaics.^c Yet I should not have left out the craft of dyeing altogether, had it ever been included among the liberal arts. In the meantime I shall take a bolder line, and there shall be assigned even to dull, that is to say, lowly plants all the dignity that is their due, since it is a fact that the founders and enlargers of the Roman Empire derived from this source also an immense advantage, because it was from them that came the tufts used when the State needed cures,^d and also the vervains required in holy ceremonies not commit the mistake of curbing, by suggesting cheaper materials, luxury by expediency, although I shall on another occasion, etc." See XXXV. § 118.

^a In times of national emergency, e.g., plague, a solemn *lectisternium* was held, in which a *sagmen* (or *verbena*) was used.

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certe utroque nomine idem significatur, hoc est gramen ex arce cum sua terra evolsum, ac semper e legatis, cum ad hostes clarigatumque mitterentur, id est res raptas clare repetitum, unus utique verbenarius vocabatur.

- 6 IV. Corona quidem nulla fuit graminea nobilior, in maiestate populi terrarum principis praemiisque gloriae. gemmatae et aureae, vallares, murales, rostratae, civicae, triumphales post hanc fuere suntque cunctae magno intervallo magnaue differentia. ceteras omnes singuli, et duces ipsi imperatoresque militibus aut aliquando collegis dedere, decrevit in triumphis senatus cura belli solutus et populus otiosus, graminea numquam nisi in desperatione suprema contigit, nulli nisi ab universo exercitu servato decreta. ceteras imperatores dedere, hanc solam miles imperatori. eadem vocatur obsidionalis liberatis obsidione abominandoque exitu totis castris. quod si civicae honos uno aliquo ac vel humillimo cive servato praeclarus sacerque habetur, quid tandem existimari debet unius virtute servatus universus exercitus? dabatur haec viridi e gramine decerpto inde ubi

^a A solemn declaration of war made with due ceremony by the *fetiales* in case the enemy had not made restitution within 33 days.

and in embassies. At any rate both names mean the same thing, that is, a turf from the citadel pulled up with its own earth; and on every occasion when envoys were sent to the enemy to perform *clarigatio*,^a that is to demand in loud tones the restitution of plundered property, one in particular was called vervain bearer.

IV. No crown indeed has been a higher honour than the crown of grass among the rewards for glorious deeds given by the sovereign people, lords of the earth. Jewelled crowns, golden crowns, crowns for scaling enemy ramparts or walls, or for boarding men-of-war, the civic crown for saving the life of a citizen, the triumph crown—these were instituted later than this grass crown, and all differ from it greatly, in distinction as in character. All the others have been given by individuals and personally by generals and commanders to their soldiers, or occasionally to their colleagues, or have been decreed in triumphs by a Senate freed from the anxiety of war and by a people enjoying peace; the grass crown has never been conferred except upon the leader of a forlorn hope, being voted only by the whole army and only to him who rescued it. The other crowns have been conferred by commanders, this alone on a commander by his soldiers. The same crown is called the siege crown when a whole camp has been relieved and saved from awful destruction. But if the civic crown is deemed a glorious and hallowed distinction because the life has been saved of only one and even maybe the lowliest citizen, what, pray, ought to be thought of the preservation of a whole army by the courage of one man? This crown used to be made from green

Crowns, especially those of grass.

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obsessos servasset aliquis. namque summum apud antiquos signum victoriae erat herbam porrigere victos, hoc est terra et altrice ipsa humo et humatione etiam cedere, quem morem etiam nunc durare apud Germanos scio.

- 9 V. Donatus est ea L. Siccus Dentatus semel, cum civicas quattuordecim meruisset depugnassetque cxx proeliis semper victor. tanto rarius est servatorem unum a servatis donari. quidam imperatores et saepius donati sunt, veluti P. Decius Mus tribunus militum ab exercitu, altera ab his qui in praesidio obsessi fuerant, quanta esset eius honoris auctoritas confessus religione, siquidem donatus bovem album Marti immolavit et centum fulvos qui ei virtutis causa dati fuerant simul ab obsessis. hic Decius postea se consul Imperioso conlega pro victoria
10 devovit. data est et a senatu populoque Romano, qua claritate nihil equidem in rebus humanis sublimius duco, Fabio illi qui rem omnem Romanam restituit non pugnando, nec data, cum magistrum equitum et exercitum eius servasset. tunc satius fuit nomine novo coronari appellatum patrem ab his quos servaverat. sed quo dictum est consensu

^a See VII. § 101 : *haud multo post exactos reges.*

^b See XVI. § 11 : *Cornelius Cosso cos. Samnitiū bello. I.e., 343-341 B.C.*

^c In the Latin war, 340-338 B.C.

^d Minucius Rufus, 217 B.C.

grass pulled up from the site where the besieged men had been relieved by some one. For in old times it was the most solemn token of defeat for the conquered to present grass to their conquerors, for to do so meant that they withdrew from their land, from the very soil that nurtured them and even from means of burial. This custom, I know, exists even today among the Germans.

V. L. Siccus Dentatus^a was presented with this crown but once, although he earned fourteen civic crowns and fought out one hundred and twenty battles, victorious in all. So much rarer a thing is it for a decoration to be conferred by rescued men upon the one man who rescued them. Certain commanders have even been decorated more than once, P. Decius Mus,^b for instance, when military tribune, once by his own army, and again by those who formed the relieved garrison. He showed by a devout act how great a dignity this distinction brought with it, seeing that after the presentation he sacrificed to Mars a white bull, as well as the hundred tawny ones which at the same time had been given to him by the relieved garrison in recognition of his courage. This Decius afterwards when consul with Imperiosus as his colleague sacrificed himself as a victim in order to secure victory.^c It was also given by the Senate and People of Rome—the highest distinction in my opinion that a human being can attain to—to that Fabius who “restored the whole Roman State” by refusing to fight, not however on the occasion when he rescued the Master of the Horse^d and his army; it was then thought preferable for a crown and a new title, “Father,” to be given him by those whom he had rescued. The unanimous

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honoratus est Hannibale Italia pulso, quae corona adhuc sola ipsius imperii manibus inposita est et, quod peculiare ei est, sola a tota Italia data.

- 11 VI. Praeter hos contigit eius coronae honos M. Calpurnio Flammae tribuno militum in Sicilia, centurioni vero uni ad hoc tempus Cn. Petreio Atinati Cimbrico bello. primum pilum is capessens sub Catulo exclusam ab hoste legionem suam hortatus tribunum suum dubitantem per castra hostium erumpere interfecit legionemque eduxit. invenio apud auctores eundem praeter hunc honorem adstantibus Mario et Catulo cos. praetextatum immolasse ad
12 tibicinem foculo posito. scripsit et Sulla dictator ab exercitu se quoque donatum apud Nola legatum bello Marsico, idque etiam in villa sua Tusculana, quae fuit postea Ciceronis, pinxit. quod si verum est, hoc execrabiliorum eum dixerim, quandoquidem eam capiti suo proscriptione sua ipse detraxit tanto paucioribus civium servatis quam postea occisis. addat etiamnum huic gloriae superbum cognomen Felicem, ipse tamen obsessis in toto orbe proscriptis
13 hac corona Sertorio cessit. Aemilianum quoque

^a Hannibal left Italy 203 B.C.

^b See Livy XXII. 60, *Epit.* XVII.

^c The date is 101 B.C.

^d The 'Social' War, 91-88 B.C.

vote I spoke of gave him the honour when Hannibal was driven from Italy,^a and the crown was the only one placed on the recipient's head by the hand of the State itself, and—a special feature in the case of Fabius—it was the only one given by the whole of Italy.

VI. Besides these the distinction of the grass crown has been won for service in Sicily ^b by M. Calpurnius Flamma, tribune of the soldiers, and in the war with the Cimbri ^c by Cn. Petreius of Atina, the only centurion to receive it up to the present time. Serving as Head Centurion under Catulus, he harangued his legion when it was cut off by the enemy, killed his own tribune when he hesitated to break through the enemy camp, and brought the legion out. I find in my authorities that in addition to this honour the same man, with the consuls Marius and Catulus at his side, offered sacrifice, wearing the magisterial gown, on a brazier placed for the purpose, and to the music of the piper. Sulla the Dictator also has written that he too was presented by his army with this crown before Nola, when he was lieutenant-general in the Marsian ^d war, and moreover had the scene painted in his Tusculan villa, afterwards the property of Cicero. If Sulla tells the truth, it would make me describe him as all the more detestable, because by his proscription he with his own hand tore the crown from his own head, so much fewer were the citizens he saved than those whom he afterwards slew. Let him also add to this distinction the proud surname of Felix, nevertheless he himself resigned to Sertorius this crown when he besieged the proscribed in every part of the world. Scipio Aemilianus also was, according to

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Scipionem Varro auctor est donatum obsidionali in Africa Manilio consule III cohortibus servatis totidemque ad servandas eas eductis, quod et statuæ eius in foro suo divus Augustus subscripsit.¹ ipsum Augustum M. Cicerone filio consule idibus Septembribus senatus obsidionali donavit, adeo civica non satis videbatur. nec præterea quemquam hac invenimus donatum.

- 14 VII. Nullae ergo herbae fuere certae in hoc honore, sed quaecumque fuerant in periculi sede quamvis ignobiles ignotaeque honorem nobilem faciebant, quod latere apud nos minus quidem miror cernens neglegi ea quoque quae ad valitudinem conservandam cruciatusque corporis propulsandos et mortem arcendam pertinent. sed quis non mores iure castiget? addidere vivendi pretia deliciae luxusque. numquam fuit vitae cupido maior nec
15 minor cura. aliorum hanc operae esse credimus ac de² mandato quidem nostro alios id agere, medicisque provisum esse pro nobis.³ ipsi fruimur voluptatibus et, quo nihil equidem probrosius duco, vivimus aliena fiducia. immo vero plerisque ultro etiam inrisui sumus ista commentantes atque frivoli operis arguimur, magno quamquam immensi laboris solatio sperni cum rerum natura, quam certe non defuisse

¹ subscripsit *Gronovius*: inscripsit *Mayhoff*: scripsit *plurimi codd.*

² de cum multis codd. *Ianus et Dellefsen*: ne R. vulg. *Mayhoff*.

³ nobis *Gronovius, Hard., Dellefsen*: morbis *Mayhoff*: bonis *codd.*

^a This would be during the third Punic war, 149 B.C.

^b Or, "Luxury and extravagance have added to the enhancements of life."

^c With *Mayhoff's* text: "even without our instructing them."

Varro, presented with the siege crown in Africa when Manilius was consul,^a having rescued three cohorts with three others led out to rescue them. Such is the story carved under Scipio's statue by Augustus, now in Heaven, in the Forum Augusti. Augustus himself, in the consulship of Marcus Cicero junior, was on the 13th September presented with the siege crown by the Senate; so inadequate was the civic crown thought to be. Nobody else at all, I find, has received this distinction.

VII. There were therefore no special plants used in making this crown, but whatever plants had been found on the site of the peril, however lowly and mean, these gave the honour its nobility. That such ignorance about the composition of this crown is rife amongst us I consider less strange when I see the further indifference to the means of preserving health, of banishing physical pain and of warding off death. But who could not with justice censure modern ways? The cost of living has been increased by luxuries and extravagance;^b never has there been more zest for life or less care taken of it. We believe that care of our life is the duty of others, that others make it their business on instructions from us,^c and that physicians have already provided for our needs. The enjoyment of pleasures is our personal affair, but our lives we entrust to the charge of somebody else, thereby incurring what I personally hold to be the worst possible disgrace. Moreover, most people actually laugh at me for carrying on research in these matters, and I am accused of busying myself with trifles. It is, however, a great comfort to me in my vast toil to know that Nature too, not I alone, incurs this contempt, for I shall

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- nobis docebimus et invisis quoque herbis inseruisse remedia, quippe cum medicinas dederit etiam aculeatis. haec enim proxime restant ex iis quas priore libro nominavimus, in quibus ipsis providentiam naturae satis admirari amplectique non est. dederat quas diximus molles cibisque gratas, pinxerat remedia in floribus visuque ipso animos invitaverat etiam deliciis auxilia permiscens. excogitavit¹ aliquas aspectu hispidas, tactu truces, ut tantum non vocem ipsius fingentis illas rationemque reddentis exaudire videamur, ne se² depascat avida quadripes, ne procaces manus rapiant, ne neglecta vestigia obterant ne insidens ales infringat, iis muniendo aculeis telisque armando, remediis ut tuta ac salva sint. ita hoc quoque quod in iis odimus hominum causa excogitatum est.
- 18 VIII. Clara in primis aculeatarum erynge est sive eryngion contra serpentes et venena omnia nascens. adversus ictus morsusque radix eius bibitur drachmae pondere in vino aut, si plerumque tales iniurias comitetur et febris, ex aqua. inlinitur plagis, peculiariter efficax contra chersydros ac ranas. vero omnibus contra toxica et aconita efficacior Heraclides medicus in iure anseris decoctam arbitratur.
- 19 Apollodorus adversus toxica cum rana³ decoquit,

¹ *Ante excogitavit add. en Mayhoff.*

² *se codd. : scilicet Mayhoff.*

³ *rana : "videtur aut cum rana corruptum esse aut post rana intercidisse in aceto vel tale quid," Mayhoff.*

^a Mayhoff thinks that "in vinegar," or something of the kind, has fallen out here, or else that the text is corrupt.

show that she at least has not failed us, having put remedies even into plants that we dislike, seeing that she has given healing properties even to those armed with prickles and thorns. For these remain to be discussed next after those plants I mentioned in the preceding book, as even in them we cannot sufficiently apprehend and admire the forethought of Nature. She had given already the soft plants I spoke of that make pleasant foods; she had coloured the remedies in flowers, and by the mere sight had attracted our attention, combining the helpful with what is actually delightful. Then she devised some so repellent to look at, so cruel to the touch, that we seem almost to hear the voice of Nature justifying herself as she fashions them, and saying that she so creates them lest any greedy animal browse on her own self, any wanton hands steal, any careless steps crush, or any perching bird break; by defending them with these thorns, by arming them with weapons, she is making a protection and safety for her remedies. This very thing then that we hate in them has been devised for the sake of mankind.

VIII. Especially famous among spinous plants is *Sea-holly*. the erynge, or eryngion, that grows to counteract snake bites and all poisons. For stings and bites its root in doses of one drachma is taken in wine, or in water if (as usually happens) such injuries are also accompanied by fever. It is applied to the wounds, being a specific for those caused by amphibious snakes and frogs. Heraclides the physician is of opinion that boiled in goose broth it is more efficacious than any other remedy for aconite and other poisoning. Apollodorus would boil it with a frog^a for poisoning, the other authorities say in water

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ceteri in aqua. ipsa dura, fruticosa, spinosis foliis, caule geniculato, cubitali et maiore aliquando, alia albicans, alia nigra, radice odorata; et sativa quidem est, sed sponte nascitur in asperis et saxosis et in litoribus maris durior nigriorque, folio apii.

- 20 IX. Ex his candidam nostri centum capita vocant. omnes eiusdem effectus, caule et radice in cibos Graecorum receptis utroque modo, sive coquere libeat sive cruda vesci. portentosum est quod de ea traditur, radicem eius alterutrius sexus similitudinem referre, raro inventu,¹ set si viris contigerit mas, amabiles fieri. ob hoc et Phaonem Lesbium dilectum a Sappho, multa circa hoc non Magorum solum vanitate
21 sed etiam Pythagoricorum. sed in medico usu praeter supra dicta auxiliatur inflationibus, torminibus, cordis vitiis, stomacho, iocineri, praecordiis in aqua mulsa, lieni in posca, item ex mulsa renibus, stranguriae, opisthotonis, spasms, lumbis, hydro-
22 picis, comitialibus, mulierum mensibus, sive subsidant sive abundant, vulvarumque omnibus vitiis. extrahit infixam corpori cum melle. strumas, parotidas,

¹ inventu fere omnes codd.: invento R et Mayhoff, qui inveniri ceni.

^a Or "hard," "tough." The adjective *durus* has both meanings, and so much ambiguity is caused in a botanical context.

^b Whatever the correct reading may be, this phrase could be taken either with what follows, as in the translation, or with the preceding sentence, when "sometimes" must be understood before "grows."

^c See Dioscorides III. 21. With Wellmann's reading the *προφῆται* called erynge a love charm (*ἡμερός*). This seems to suggest that Pliny identified the *προφῆται* with the Magi.

only. The plant itself is hardy,^a bushy, with prickly leaves and jointed stem, a cubit high or occasionally taller, partly palish in colour, partly dark, and with a fragrant root. While it is a cultivated plant it also grows wild on rough, stony ground and on the sea shore, when it is more hardy and darker, with a leaf like that of celery.

IX. Of these the pale variety is called "hundred heads" by our countrymen. All kinds have the same properties, and the Greeks make a food of the stem and the root, served in either way you like, boiled or eaten raw. Marvellous is the characteristic reported of it, that its root grows into the likeness of the organs of one sex or the other; it is rarely so found,^b but should the male form come into the possession of men, they become lovable in the eyes of women. This, it is said, is how Phaon^c of Lesbos too won the love of Sappho, there being much idle trifling on this subject not only among the Magi but also among the Pythagoreans.^d When used in medicine, however, besides the advantages mentioned above, it relieves flatulence, colic, affections of the heart, stomach, liver and hypochondria, if taken in hydromel, and the spleen if taken in vinegar and water. With hydromel again it helps the kidneys, strangury, opisthotonic tetanus,^e cramp, lumbago, dropsy, epilepsy, deficiency or excess in menstruation, and all affections of the uterus. With honey it draws out substances embedded in the flesh. Applied

^a As is suggested by the punctuation of Detlefsen and Mayhoff, this sentence is taken to be part of the indirect speech, with *multa* ablative. With a full stop at *Sappho*, it could be taken as a comment of Pliny, with *multa* neuter plural.

See pp. xi-xii and p. 368, n. a.

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panos, recedentes ab ossibus carnes sanat cum axungia salsa et cerato, item fracturas. crapulam praesumpta arcet, alvum sistit. aliqui e nostris sub solstitio colligi eam iussere, ex aqua caelesti inponi omnibus cervicis vitiis.¹ oculorum quoque albugines sanare adalligatam² tradiderunt.

23 X. Sunt qui et acanum eryngio adscribant, spinosam brevemque et latam herbam spinisque latoribus. hanc inpositam sanguinem mire sistere.

24 XI. Alii eryngen falso eandem putavere esse et glycyrrhizam, quare subiungi eam protinus refert. et ipsa sine dubio inter aculeatas est, foliis echinatis, pinguibus tactuque cumminosis, fruticosa, binum cubitorum altitudine, flore hyacinthi, fructu pilularum platani magnitudinis. praestantissima in Cilicia, secunda Ponto, radice dulci et hac tantum in

25 usu. capitur ea vergiliarum occasu, longa ceu lycium,³ coloris buxei melior quam⁴ nigra, quaeque lenta quam quae fragilis. usus in subditis decoctae ad tertias, cetero ad mellis crassitudinem, aliquando et tusae, quo genere et vulneribus inponitur et faucium vitiis omnibus, item voci utilissimo⁵ suco

¹ vitiis. *Sic dist. Mayhoff.*

² adalligatamque VR: adalligatam aliqui *Mayhoff.*

³ ceu lycium *Urlichs*: ceu vitium aut ceu vitui *codd.*: sucosa ceu lycium *Mayhoff*, ex *Diosc.* χυλιζόμεναι ὡς περ τὸ λύκιον.

⁴ quam *Gronovius, Deilefsen*: quae *Mayhoff*: que *codd.*

⁵ utilissimo cum *codd.* *Deilefsen*: utilissima *cont.* *Mayhoff.*

^a For eye-diseases, see pp. viii-x.

^b *I.e.*, 11 November.

with salted axle-grease and wax ointment it heals scrofulous sores, parotid tumours, superficial abscesses, and the falling away of flesh from the bones; fractures also. Taken beforehand it keeps off the after-effects of wine, and checks looseness of the bowels. Some of our countrymen have recommended it to be gathered near the summer solstice and to be applied with rain water for all affections of the neck. Some have recorded that albugo ^a also of the eyes is cured by using it as an amulet.

X. Some with eryngium class acanus also, a thorny, short and broad plant, with rather broad thorns. An application of it is said to be wonderfully good for checking haemorrhage.

XI. Some have incorrectly thought that erynge is the same as liquorice, which therefore should come immediately after erynge in my discussion. The plant itself is undoubtedly among the spinous ones, with prickly, fleshy, gummy leaves, bushy, two cubits high, with a flower like the hyacinth, and fruit the size of the little balls of the plane tree. The finest grows in Cilicia, the next best in Pontus; it has a sweet root, the only part to be used. It is dug up at the setting of the Pleiades,^b and is as long as lycium root, the boxwood-coloured being superior to the dark ^c and the pliant to the brittle. To be used as a suppository ^d it is boiled down to one-third, for other purposes to the consistency of honey, though occasionally it is pounded, in which form it is applied to wounds and for all affections of the throat. Merely

^a With Mayhoff's reading: "of the colour of boxwood, the dark being superior, and the pliant being superior to the brittle."

^d Perhaps, "pessary."

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- sic ut spissatus est linguae subdito, item thoraci,
 26 iocineri. hac diximus sitim famemque sedari. ob
 id quidam adipson appellavere eam et hydropicis
 dedere, ne sitirent. ideo et conmanducata stomatice
 est et ulceribus oris inspersa saepe et pterygiis.
 sanat et vesicae scabiem, renium dolores, condylo-
 mata, ulcera genitalium. dedere eam quidam potui
 in quartanis drachmarum duarum pondere et piper
 ex¹ hemina aquae. conmanducata sanguinem ex
 vulnere sistit. sunt qui et calculos ea pelli tradi-
 derunt.
- 27 XII. Tribuli unum genus in hortis nascitur,
 alterum in fluminibus tantum. sucus ex his col-
 ligitur ad oculorum medicinas, est enim refrigerantis
 naturae et ideo utilis contra inflammationes collec-
 tionesque. ulcera per se erumpentia et praecipue
 in ore cum melle sanat, item tonsillas. potus cal-
 culos frangit. Thraces qui ad Strymona habitant
 foliis tribuli equos saginant, ipsi nucleo vivunt panem
 facientes praedulcem et qui contrahat ventrem.
 radix caste pureque collecta discutit strumas, semen
 adalligatum varicum dolores sedat, tritum vero in
 aquam sparsum pulices necat.
- 28 XIII. Stoebe quam aliqui pheon vocant, decocta
 in vino praecipue auribus purulentis medetur, item

¹ et piper ex *Mayhoff*: et aut ex pipere *codd.*

^a XI. § 284.

^b With the MSS. reading the meaning is the same, but oddly expressed, as *ex* with the ablative usually denotes the base of a draught or medicine (*ex aqua, e vino, ex aceto, ex oleo*, etc.). But cf. XX. 91 *si detur ex carne* (this is not quite the same).

^c This is *Poterium spinosum*.

thickened and then placed under the tongue the juice is good for the voice; it is also good for the chest and liver. I have already stated^a that this root allays hunger and thirst, for which reason some have named it *adipsos* (thirst-quencher), and prescribed it for dropsy, in order to prevent thirst. Because of this property it is chewed as a mouth medicine, and it is often sprinkled on sores in the mouth and inflammatory swellings of the eye-lids. It also cures irritation of the bladder, pains in the kidneys, tumours of the anus, and sores on the genitals. Some have prescribed it in a draught for quartan ague, in doses of two drachmae by weight, with pepper,^b to be taken in a hemina of water. Chewed, it checks the flow of blood from a wound. Some authorities have asserted that it also expels stone from the bladder.

XII. One kind of *caltrop* grows in gardens, the other only in rivers. From both the juice is collected to make eye medicines, for it is of a cooling nature and therefore useful for inflammations and abscesses. Mixed with honey it heals sores that break out of themselves, especially those in the mouth, and also sore tonsils. Taken in drink it breaks up stone in the bladder. The Thracians on the banks of the Strymon feed their horses on the leaves of the *caltrop*, themselves living on the kernel, out of which they make a very pleasant bread, and one to bind the bowels. The root, if gathered in chastity and purity, disperses scrofulous sores; the seed used as an amulet soothes painful varicose veins; pounded, moreover, and sprinkled in water it kills fleas.

XIII. *Stoebe*,^c which some call *pheos*, boiled in wine is specific for suppurating ears, as well as for

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oculis ictu cruentatis, haemorrhagiae quoque et dysinteriae infusa.

- 29 XIV. Hippophaes in sabulosis maritimisque,¹ spinis albis, hederæ modo racemosa est, candidis, ex parte rubentibus acinis. radix suco madet qui aut per se conditur aut pastillis farinae ervi. bilem detrahit obolo ponderis,² saluberrime cum mulso. est altera hippophaes sine caule, sine flore, foliis tantum minutis. huius quoque sucus hydropicis mire prodest.
- 30 debent adcommodatae esse et equorum naturae, neque ex alia causa nomen accepisse. quippe quaedam animalium remediis nascuntur locupletati divinitate ad generanda praesidia, ut non sit mirari satis ingenium eius disponentis auxilia in genera, in causas, in tempora, ut aliis prosit aliud horis diesque nullus prope sine praesidiis reperiatur.

- 31 XV. Urtica quid esse invisius potest? at illa praeter oleum quod in Aegypto ex ea fieri diximus vel plurimis scatet remediis. semen eius cicutae contrarium esse Nicander adfirmat, item fungis et argento vivo, Apollodorus et salamandris cum iure coctae testudinis, item adversari hyoscyamo et serpentibus et scorpionibus. quin ipsa illa amaritudo mordax uvas in ore procidentesque vulvas et in-

¹ maritimisque *Detlefsen* : maritimis *codd.* (simaritudinis R) *Mayhoff* : maritimisque nascitur, *vulg.*

² obolo ponderis *codd.* : oboli pondere *Mayhoff*.

^a See XV. § 30.

^b *Alexipharmaca* 201.
Turtle (?).

black eyes. It is injected into the bowels for haemorrhage and dysentery.

XIV. Hippophaes grows on sandy soils and by the sea. It has pale thorns, and clusters, like those of ivy, with berries partly white and partly red. Its root is rich in a juice which is either dispensed by itself or made up into lozenges with vetch meal. An obolus by weight carries off bile, most healthfully if taken with honey wine. There is another hippophaes, consisting only of very small leaves without stem or flower. The juice of this also is wonderfully good for dropsy. They must be well suited to the constitution of horses too, and must also have received their name for this and no other reason. The fact is that certain plants are created to be remedies for the diseases of animals, the Deity being bounteous in producing protections for them, so that it is impossible to admire enough his wisdom, which arranges the aids according to the type of disease, the cause of it, and its season. Each period of the year has its own appropriate remedy, and scarcely can any day be found that is without its safeguards.

XV. What can be more hateful than the nettle? Yet this plant, to say nothing of the oil which I have said ^a is made from it in Egypt, simply abounds in remedies. Nicander ^b assures us that its seed counteracts hemlock, and also the poison of fungi and of mercury. Apollodorus says that with the broth of boiled tortoise ^c it is good for salamander bites, and as an antidote for henbane, snake bites and scorpion stings. Moreover, its pungent bitterness itself, by the mere touch, forces to subside swollen uvulas, restoring prolapsus of the uterus, and of

Sea-spurge.

Uses of the nettle.

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- fantium sedes tactu resilire cogit, lethargicos exper-
- 32 gisci tactis cruribus magisque fronte. eadem canis morsibus addito sale medetur, sanguinem trita naribus indita sistit et magis radice. carcinomata et sordida ulcera sale admixto, item luxata sanat et panos, parotidas carnesque ab ossibus recedentes. semen potum cum sapa vulvam strangulatis aperit, profluvia narium sistit inpositum. vomitiones in aqua mulsa sumptum a cena faciles praestat duobus obolis, uno autem in vino poto lassitudines recreat.
- 33 vulvae vitiis tostum acetabuli mensura, potum in sapa resistit stomachi inflationibus. orthopnoicis prodest cum melle et thoracem purgat eodem ecligmate et lateri medetur cum semine lini. addunt hysopum et piperis aliquid. inlinitur lieni, difficilem
- 34 ventrem tostum cibo emollit. Hippocrates vulvam purgari poto eo pronuntiat, dolore levare tosto acetabuli mensura, dulci poto et inposito cum suco malvae, intestinorum animalia pelli cum hydromelite et sale, defluvia capitis semine inlito cohonestari. articulariis morbis et podagricis plurimi cum oleo vetere aut folia cum ursino adipe trita inponunt. ad eadem radix tusa cum aceto non minus utilis, item lieni, et cocta in vino discutit panos cum axungia
- 35 vetere salsa. eadem psilotrum est sicca. condidit laudes eius Phantias physicus, utilissimam cibus

^a See pp. xiii-xiv.

^b Possibly "running."

^c Perhaps "or," as *et* must often be rendered.

the anus of babies, besides waking up lethargus^a patients if it touches their legs or better still their forehead. The same plant with the addition of salt heals dog bites; pounded and inserted it arrests nose bleeding, the root proving even better. Mixed with salt it heals carcinoma and foul ulcers, likewise sprains, superficial abscesses, parotid abscesses and falling away of flesh from the bones. The seed taken with boiled must relieves suffocation of the uterus, and an application checks bleeding^b at the nose. Taken in hydromel after dinner in a dose of two oboli it makes vomiting easy, while one obolus in wine refreshes after fatigue. Uterine affections are relieved by an acetabulum of the roasted seed, and flatulence by taking it in boiled must. With honey it relieves asthma, clears the chest by the same made into an electuary, and with linseed cures pain in the side. Hyssop may be added and a little pepper. It is used as an application for the spleen; roasted and taken as food it loosens constipated bowels. Hippocrates declares that taken in drink it purges the uterus, that an acetabulum of it roasted and taken in sweet wine and ^c applied with mallow juice relieves uterine pains, that intestinal worms are expelled if it be taken with hydromel and salt, and that a liniment made from its seed replaces disfiguring loss of hair. For affections of the joints and for gout most prescribe application of it with old oil or of the pounded leaves with bears' grease. The crushed root with vinegar is no less useful for the same purposes, and also for the spleen, and boiled in wine and mixed with old and salted axle-grease it disperses superficial abscesses. The same root dried is a depilatory. Phantias the naturalist has sung its

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- coctam conditamve professus arteriae, tussi, destillationi, stomacho, panis, parotidibus, per-nionibus, cum oleo sudorem, coctam cum conchyliis ciere alvum, cum tisana pectus purgare mulierumque menses, cum sale ulcera quae serpant cohibere.
- 36 suco quoque in usu est. expressus inlitus fronti sanguinem narium sistit, potus urinam ciet, calculos rumpit, uvam gargarizatus reprimit. semen colligi messibus oportet. Alexandrinum maxime laudatur. ad omnia haec et mitiores quidem teneraeque effi-caces, sed praecipue silvestris illa, et hoc amplius lepras e facie tollit in vino pota. si quadripes fetum non admittat, urtica naturam fricandam monstrant.
- 37 XVI. Ea quoque quam lamium inter genera earum appellavimus, mitissima et foliis non morden-tibus, medetur cum mica salis contusis incussisque, inustis et strumis, tumoribus, podagris, vulneribus. album habet in medio folio quod ignibus sacris
- 38 medetur. quidam e nostris tempore discrevere genera, et autumnalis urticae radicem adalligatam in tertianis ita ut aegri nuncupentur, cum eruatur ea radix, dicaturque cui et quorum filio eximatur, liberare morbo tradiderunt, hoc idem et contra quartanas pollere. iidem urticae radice addito sale

^a See XXI. § 93.

^b See p. xiii.

praises, maintaining that either boiled or preserved it is a most useful food for the trachea, cough, bowel catarrh, the stomach, superficial abscesses, parotid swellings and chilblains, that with oil it is sudorific, boiled with shell-fish a laxative, that with barley-water it clears the chest and promotes menstruation, and that mixed with salt it arrests creeping sores. For the juice too a use is found. An extract applied to the forehead checks bleeding at the nose; a draught is diuretic, breaks up stone in the bladder, and used as a gargle reduces the uvula. The seed should be gathered at harvest time, that of Alexandria being most prized. For all these purposes, though the milder and tender nettles are efficacious, the well known wild variety is particularly so, and it has this further merit, when taken in wine, of removing leprous sores from the face. We are told that should an animal resist conception, its parts should be rubbed with a nettle.

XVI. That species of nettle which I have called ^a *Dead-nettle and other plants.* lamium (dead-nettle), a very mild kind with leaves that do not sting, cures with a sprinkling of salt contusions, bruises, burns, scrofulous sores, tumours, gouty pains and wounds. The middle of the leaf is white, and cures erysipelas. Certain of our countrymen have distinguished nettles by their season, stating that the disease is cured if the root of the autumn nettle is used as an amulet for tertian ague,^b provided that when this root is dug up the names of the patients be uttered, and it be said for what man it is taken up and who his parents are; the same method is effective in quartan agues. The same authorities add that the root of the nettle, with salt added, extracts bodies embedded in the flesh, that

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infixa corpori extrahi, foliis cum axungia strumas discuti vel, si suppuraverint, erodi, compleri.

- 39 XVII. Ex argumento nomen accepit scorpio herba. semen enim habet ad similitudinem caudae scorpionis, folia pauca. valet et¹ adversus animal nominis sui. est et alia eiusdem nominis effectusque sine foliis, asparagi caule, in cacumine aculeum habens et inde nomen.
- 40 XVIII. Leucacantham alii phyllon, alii ischada, alii polygonaton appellant, radice cypiri, quae commanducata dentium dolores sedat, item laterum et lumborum, ut Hicesius tradit, semine poto drachmis octo aut suco. eadem ruptis, convulsis medetur.
- 41 XIX. Helxinen aliqui perdicium vocant, quoniam perdices ea praecipue vescantur, alii sideritem, nonnulli parthenium. folia habet mixtae similitudinis plantagini et marruvio, cauliculos densos, leviter rubentes, semina in capitibus lappaceis adhaerescencia vestibis, unde et helxinen dictam volunt. sed nos qualis vera esset helxine diximus
- 42 priore libro. haec autem inficit lanas, sanat ignes sacros et tumores collectionesque omnes et adusta, panos; succus eius cum psimithio et guttura incipientia turgescere, item veterem tussim cyatho hausto et omnia in umido,² sicut tonsillas, et aures³ cum rosaceo.

¹ et *del. Mayhoff.*

² in umido *aut ut in umido codd.*; vitia umida *Mayhoff.*

³ aures *Mayhoff*: arietes *aut varices codd.*

^a *Polygonum maritimum.* ^b *I.e., from the Greek ἑλκω.*

^c See XXI. § 96.

the leaves with axle-grease disperse scrofulous swellings, or, if they have suppurated, cause them to clear up and new flesh to be formed.

XVII. Association has given its name to the scorpion plant. For it has seed that resembles the tail of the scorpion, but only a few leaves. It has moreover power over the creature of the same name. There is also another kind, with the same name and properties, that is leafless, with the stem of asparagus, having on its head the sharp point which has given the plant its name.

XVIII. Leucacantha, also called phyllos, ischas, or polygonatum, has a root like that of cypirus, which when chewed relieves tooth-ache; pains also in the sides and loins, as Hicesius teaches, the seed or juice being taken in drink, and the dose being eight drachmae. The same plant is used for the cure of ruptures and convulsions.

XIX. Helxine, called by some perdicium^a (partridge plant) because partridges are particularly fond of eating it, by others sideritis, and by a few people parthenium, has leaves that resemble partly those of the plantain and partly those of horehound, stalks small, close together and reddish in colour, and, in bur-shaped heads, seeds that cling to the clothes. Hence is derived, some hold, the name helxine.^b The characteristics, however, of the genuine helxine I have described in the preceding book,^c but this helxine dyes wool, cures erysipelas, every kind of tumour or boil, burns and superficial abscesses. Its juice with white-lead cures also incipient swelling of the throat, and a draught of a cyathus cures chronic cough and all complaints in moist parts, like the tonsils; with rose oil it is good

Helxine and perdicium.

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inponitur et podagris cum caprino sebo ceraque Cypria.

- 43 XX. Perdicium sive parthenium sive etiam sideritis alia est¹; ab nostris herba urceolaris vocatur, ab aliis astercum; folio similis ocimo, nigrior tantum, nascens in tegulis parietinisque. medetur cum mica salis trita iisdem omnibus quibus lamium, et eodem modo, item vomicae calfacto suco pota, sed contra vulsa, rupta lapsusque et praecipitia, ut vehiculorum
- 44 eversiones, singularis. verna carus Pericli Atheniensium principi, cum is in arce templum aedificaret repissetque super altitudinem fastigii et inde cecidisset, hac herba dicitur sanatus monstrata Pericli somnio a Minerva, quare parthenium vocari coepta est adsignaturque ei deae. hic est vernula cuius effigies ex aere fusa est nobilis ille splanchnoptes.
- 45 XXI. Chamaeleonem aliqui ixian vocant. duo genera eius: candidior asperiora habet folia, serpit in terra echini modo spinas erigens, radice dulci, odore gravi.² quibusdam in locis viscum gignit album sub alis foliorum, maxime circa canis ortum, quo modo tura nasci dicuntur, unde et ixia appellatur. hac mastiche utuntur mulieres. quare et

¹ *Ita coni. et dist. Mayhoff*: nam *pro* etiam *aut* sive etiam *codd.*

² *gravi plurimi codd.*: gravissimo R et vulg.

^a Dioscorides has (IV. 85): καὶ ὡταλγίας σὺν ῥοδίνῳ ἐγγεόμενος. So Mayhoff's conjecture is probably right. With the reading *varices* translate "for varicose veins."

^b The reading of Mayhoff seems slightly preferable to others', but owing to the confused descriptions of these plants in Dioscorides, and the uncertain use of the names in Pliny, the text is doubtful.

^c *I.e.*, the Parthenon.

^d Because Athena (Minerva) was παρθένος.

for the ears.^a It is also applied, with goat suet and Cyprian wax, to gouty limbs.

XX. *Perdicium* or *parthenium* or, to give it yet another name, *sideritis*, is another plant,^b called by some of our countrymen *urceolaris*, by others *astercum*. It has a leaf similar to that of basil, only darker, and it grows on tiles and among ruins. Pounded and sprinkled with a pinch of salt it cures the same diseases as dead-nettle, all of them, and is administered in the same way. The juice too taken hot is good for abscesses, and is remarkably good for convulsions, ruptures, bruises caused by slipping or by falling from a height, for instance, when vehicles overturn. A household slave, a favourite of Pericles, first citizen of Athens, when engaged in building the temple^c on the Acropolis, crawled on the top of the high roof and fell. He is said to have been cured by this plant, which in a dream was prescribed to Pericles by Minerva; therefore it began to be called *parthenium*,^d and was consecrated to that goddess. This is the slave whose portrait was cast in bronze, the famous Entrail Roaster.^e

XXI. The *chamaeleon* is called by some *ixia*. *Pine thistle*
There are two kinds of it. The whiter has rougher *(Atractylis gummiifera).*
leaves, and creeps along the ground raising its prickles as the hedgehog does his quills; it has a sweet root and a strong smell. In some districts it exudes a white viscous substance just where the leaves join the stem, especially about the time the Dogstar^f rises, in the way frankincense is said to form, and this is why it is also called *ixia*.^g Women use it as chewing-gum. The other name *chamaeleon* comes

^a See XXXIV. § 81.

^f That is 17 July.

^g The name *ixia* (*ἰξία*) is connected by Pliny with *viscum*.

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chamaeleon vocetur, varietate foliorum evenit. mutat enim cum terra colores, hic niger, illic viridis, aliubi cyaneus, aliubi croceus atque aliis coloribus.

46 ex his candidus hydropicos sanat suco radicis decoctae. bibitur drachma in passo. pellit et intera-
neorum animalia acetabuli mensura suci eiusdem in vino austero cum origani scopis. facit ad difficultatem urinae. hic sucus occidit et canes suesque in polenta addita aqua et oleo,¹ contrahit in se mures ac necat, nisi protinus aquam sorbeant. radicem eius aliqui concisam servari iubent funiculis pendentem decoquique in cibo contra fluxiones quas Graeci

47 rheumatismos vocant. ex nigris aliqui marem dixere cui flos purpureus esset et feminam cui violaceus. una² nascuntur caule cubitali, crassitudine digitali. radicibus earum³ lichenes curantur cum sulphure et bitumine una coctis, conmanducatis vero dentes mobiles aut in aceto decoctis. suco scabiem et quadripedum sanant. et ricinos canum necat, iuvenco quoque anginae modo, quare a quibusdam ulophonon⁴ vocatur et⁵ cynozolon propter gravitatem odoris. ferunt et haec viscum ulceribus utilissimum.

¹ *Ita dist. Mayhoff.*

² una R, *vulg.*, *Dellefsen*: et una plurimi *codd.*: set una *Mayhoff.*

³ earum (*sc. herbarum*) omnes *codd.*: eorum *Mayhoff.*

⁴ ulophonon *Barbarus*, *Dellefsen*: ulophyton *Mayhoff*: ulophiton, ulophilon, olopylon *codd.*

⁵ et *Barbarus*, *Dellefsen*: est et *codd.*: set et *Mayhoff.*

^a Said by many to be catarrhs, but *πευματιζομαι* and *πευματισμοι* are apparently used of any "streaming" fluxes.

^b *Mayhoff's set* would make the logical connection clearer: "Though some distinguish sexes, yet, etc."

from the varied colour of its leaves; for it changes its colour with the soil—dark here, green there, in some places blue, in others saffron yellow, and of other colours elsewhere. A decoction of the root of the white variety cures dropsy, the dose being a drachma taken in raisin wine. Intestinal parasites also are expelled by a dose of an acetabulum of the same juice taken in a harsh wine with sprigs of wild marjoram. It is diuretic. Dogs too and pigs are killed by this juice in pearl barley with water and oil added. It attracts mice to itself, and kills them, unless they swallow water at once. Some people recommend that its root be cut up and kept suspended by cords, and be boiled in food against those fluxes which the Greeks call *ῥευματισμοί*.^a Of the dark variety that with a purple flower is said by some to be the male plant, that with a violet flower the female. They grow together,^b with a stem a cubit high and of the thickness of a finger. Their roots, boiled with sulphur together with bitumen, cure lichen;^c chewed, moreover, or boiled down in vinegar, they tighten loose teeth, and the juice cures the scab in animals. It kills ticks on dogs, as well as bullocks, choking them as a quinsy does, for which reason some call it *ulophonon*,^d and it is also called, because of its offensive smell, *cynozolon*.^e These plants too produce a viscous substance, which is very good for sores. The roots too of all

^a A skin eruption, usually appearing on the face, when it was called *mentagra* (chin-disease). See Celsus VI. 3, where it is also called *σύνκωσις*, because the diseased area resembled the inside of a ripe fig.

^d "The very deadly plant" (*οὐλοφόνον*).

^e "Smelling like a dog" (*κυνόζολον*).

PLINY : NATURAL HISTORY

omnium autem generum eorum radices scorpionibus adversantur.

- 48 XXII. Coronopus oblonga herba est cum fissuris. seritur interim, quoniam radix coeliacis praeclare facit in cinere tosta.

XXIII. Et anchusae radix in usu est, digitali crassitudine. finditur papyri modo manusque inficit sanguineo colore, praeparat lanas pretiosis coloribus. sanat ulcera in cerato, praecipue senum, item adusta. liquari non potest in aqua, oleo dissolvitur, idque
49 sinceræ experimentum est. datur et ad renium dolores drachma eius potui in vino aut, si febris sit, in decocto balani, item iocinerum vitiis et lienis et bile subfusus. lepris et lentigini inlinitur ex aceto. folia trita cum melle et farina luxatis inponuntur, et pota drachmis duabus in mulso alvum sistunt. pulices necare radix in aqua decocta traditur.

- 50 XXIV. Est et alia similis pseudoanchusa ob id appellata, a quibusdam vero echis aut doris et multis aliis nominibus, lanuginosior et minus pinguis, tenuioribus foliis languidioribus. radix in oleo non fundit rubentem sucum, et hoc ab anchusa discernitur. contra serpentes efficacissima potu foliorum vel seminis. folia ictibus inponuntur. virus serpentes fugat. bibitur et propter spinam. folium

^a In the leaves.

^b *Pretiosis coloribus* can be dative or ablative. Two translations are possible: "prepares wools for (more) costly colours" or "prepares wools with costly colours", i.e. with colours which if genuine would be costly. Book XXIV. 96: *tingentibus et radícula lanas praeparat*, "soapwort prepares wools also for dyers", points to the former of these alternatives.

^c Perhaps Pliny has confused this with the Greek *ἐχίον*.

^d "The Dorian plant."

their kinds are an antidote to the sting of the scorpion.

XXII. Hartshorn is a longish plant with fissures.^a *Hartshorn.* Sometimes it is cultivated, because its root, roasted in hot ashes, is a splendid remedy for coeliac complaints.

XXIII. Alkanet too has a useful root, which is of the thickness of a finger. It is split into small divisions like the papyrus, and stains the hands the colour of blood; it prepares wools for costly colours.^b Applied in wax ointment it heals ulcerous sores, especially those of the aged, and also burns. Insoluble in water, it dissolves in oil, and this is the test of genuineness. A drachma of it is given to be taken in wine for pains in the kidneys, or if there be fever, in a decoction of behen nut; also for affections of the liver and spleen and for violent biliousness. It is applied in vinegar to leprous sores and freckles. The pounded leaves, with honey and meal, are applied to sprains, and doses of two drachmae in honey wine check looseness of the bowels. Fleas are said to be killed by a decoction of the root in water.

XXIV. There is also another plant, which being like alkanet is called bastard alkanet, though some call it echis^c or doris^d or by many other names; it is more downy than the other and less fleshy, the leaves are thinner and more flabby. The root in oil does not give out a red juice, by which test it is distinguished from true alkanet. The leaves or seed taken in drink are a very sure antidote to snake bite. The leaves are applied to stings and bites, and their strong smell keeps snakes away. A draught too is made from the plant for affections of the spine.

PLINY : NATURAL HISTORY

eius sinistra decerpi iubent Magi, et cuius causa sumatur dici tertianisque febribus adalligari.

- 51 XXV. Est et alia herba proprio nomine onochilon, quam aliqui anchusam vocant, alii archebion, alii onochelim, aliqui rhexiam, multi enchrysam, parvo frutice, flore purpureo, asperis foliis et ramis, radice messibus sanguinea, cetero nigra, in sabulosis nascens, efficax contra serpentes maximeque viperas, et radice et foliis, aequè cibo ac potu. vires habet messibus. folia trita odorem cucumeris reddunt.
- 52 datur in cyathis tribus vulva procidente. pellit et taenias cum hysopo, et in dolore renium aut iocineris ex aqua mulsa, si febris sit, sin aliter, e vino bibitur. lentigini ac lepris radix inlinitur. habentes eam a serpentibus feriri negantur. est et alia huic similis flore rubro, minor, et ipsa ad eosdem usus, traduntque, commanducata ea si inspuatur, mori serpentem.
- 53 XXVI. Anthemis magnis laudibus celebratur ab Asclepiade. aliqui leucanthemida vocant, alii leucanthemum, alii eranthemida, quoniam vere floreat, alii chamaemelon, quoniam odorem mali habeat. nonnulli melanthion vocant. genera eius tria flore ¹

¹ flore, *Barbarus* (ταύτης εἶδη τρία, ἄνθει μόνον διαφέροντα, *Dioscorides* III. 137): fronde fere omnes codd., *Detlefsen*, *Mayhoff*.

^a *Folium* may perhaps be collective, "leaves."

^b Forcellini gives four examples of *frutex* in the sense of *caulis*, though the use is not specified in Lewis and Short ;

The Magi recommend that a leaf^a of it should be gathered with the left hand, with a declaration for whom it is being taken, and used as an amulet for tertian fevers.

XXV. There is another plant also, the proper *Bugloss.* name of which is onochilon, called by some people anchusa, or archebion, or onochelis, or rhexia, and by many enchrysa. It has a short base,^b a purple flower, rough leaves and branches, a root blood-red at harvest time, though dark at other times, growing on sandy soils, an antidote to the bites of serpents, especially of vipers, both root and leaves being equally efficacious in food and in drink. Its properties are strongest at harvest time. Its leaves when pounded give out the smell of cucumber. It is given in doses of three cyathi for prolapsus of the uterus. With hyssop it also drives out tape-worms, and for pain of the kidneys or liver it is taken in hydromel, should there be fever, otherwise in wine. The root is applied locally for freckles and leprous sores. It is said that while having it on their person people are never bitten by serpents. There is also another plant similar to this, but smaller, with a red flower, which is also used for the same purposes. It is said that if this plant be chewed, and then spat out on a serpent, the serpent dies.

XXVI. Chamomile is most highly praised by Ascle- *Chamomile.* piades. Some call it white chamomile, others leucanthemum, others eranthemis, because it blossoms in spring, others ground-apple (chamaemēlon), because it has the smell of an apple. A few call it melanthion. Its three varieties differ only in their possibly *frutex* had this meaning when the plant was one bush on a short, stout stem, as bugloss often is.

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- tantum distant, palmum non excedentia, parvis foliis rutae similibus, floribus¹ candidis aut malinis aut purpureis. In macro solo aut iuxta semitas colligitur vere et in coronamenta reponitur. eodem tempore et medici folia tusa in pastillos digerunt,
- 54 item florem et radicem. dantur omnia mixta drachmae unius pondere contra serpentium omnium ictus. pellunt mortuos partus, item menstrua in potu et urinam calculosque,² inflationes, iocinerum vitia, bilem subfusam, aegilopia, commanducata ulcerum eruptiones manantes sanat. ex omnibus his generibus ad calculos efficacissima est quae florem purpureum habet, cuius et foliorum et fruticis amplitudo maiuscula est. hanc proprie quidam *eranthemim* vocant.
- 55 XXVII. Loton qui arborem putant tantum esse vel Homero auctore coargui possunt. is enim inter herbas subnascentes deorum voluptati loton primam nominavit. folia eius cum melle oculorum cicatrices, argema, nubeculas discutiunt.

¹ similibus floribus *add. Urlichs: om. codd. Dioscorides loc. cit.: κεφάλια . . . ἐνδοθεν μὲν λευκὸν καὶ χρυσεῖον ἀνθύλλιον ἔχοντα, ἐξωθεν δὲ περικείται κυκλωτερώς λευκὰ ἢ μήλινα ἢ πορφυρὰ φυλλάρια.*

² *Ante inflationes add. inlita Mayhoff: fortasse ante iocinerum melius.*

^a It is impossible to bring Pliny and Dioscorides into harmony without emendation. Of course it is not necessary

blossom; they are no taller than a span, with small leaves like those of rue, and with blossom^a that is white or apple-yellow or purple. It is gathered in spring on thin soils or near foot-paths, and put by for making chaplets. At the same season physicians also make up into lozenges the pounded leaves, as well as the blossom and the root. All three are mixed and given in doses of one drachma for the bites of every kind of snake. Taken in drink they bring away the dead foetus, are emmenagogues and diuretic, as well as good for stone, flatulence,^b affections of the liver, for excessive secretion of bile and for fistula of the eye; chewed it heals running sores. Of all these kinds the most efficacious for stone in the bladder is that which has a purple flower, the leaves and stem of which are of a rather larger size. Some people give the name *eranthemis* exclusively to this variety.

XXVII. Those who think that the lotus is only a tree can be refuted even by the authority of Homer,^c *Lotus and its varieties.* who among the plants that grow up to serve the pleasure of the gods mentions the lotus first. Its leaves with honey cause to disappear scars on the eyes, films on the eyes and argema.

to do so, but when the language of two authorities is so strikingly similar, too great or too many differences are suspicious. The worst difficulty is the strange assignment of white, yellow and purple to leaves. But Warmington points out that if, in Dioscorides (see critical note), we take *ἀνθύλλιον* to mean the yellow central disk of the flower, and *φυλλάρια* as outer ray-petals of the flower, the Greek description fits chamomile. It is easy to emend Pliny so that he agrees with himself, but the difficulty of Dioscorides remains.

^b Probably Pliny forgot to write *inlita*, "applied locally," here.

^c See *Iliad* XIV. 347.

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- 56 XXVIII. Est et lotometra quae fit ex loto sata, ex cuius semine simili milio¹ putri² fiunt panes in Aegypto a pastoribus, maxime aqua vel lacte subacti.³ negatur quicquam illo pane salubrius esse aut levius, dum caleat. refrigeratus difficiliter concoquitur fitque ponderosus. constat eos qui illo vivant nec dysinteria nec tenesmo neque aliis morbis ventris infestari. itaque inter remedia eorum habent.
- 57 XXIX. Heliotropi miraculum saepius diximus cum sole se circumagentis etiam nubilo die, tantus sideris amor est. noctu velut desiderio contrahit caeruleum florem. genera eius duo: tricoccum et helioscopium.
- 58 hoc altius, quamquam utrumque semipedalem altitudinem non excedit, ab una⁴ radice ramosum. semen in folliculo messibus colligitur. nascitur nonnisi in pingui solo cultoque maxime, tricoccum ubique. si decoquatur, invenio cibis placere et in lacte iucundius alvum molliri et, si decocti sucus bibatur, efficacissime exinaniri. maioris sucus excipitur aestate hora
- 59 sexta, miscetur cum vino, sic firmior. capitis

¹ simili milio *Barbarus*: simili mili *Sillig*: simillimi aut simillimo aut simillime *codd.*

² putri *Deilefsen*: porri *codd.*: puri vel parvi *coni.* *Mayhoff.*

³ subacti *Mayhoff*: subacto aut subactio *codd.*: subacto *Deilefsen*: subacto et *coni.* *Mayhoff.*

⁴ una *codd.*: ima cum *vulg.* *Mayhoff.*

^a This word is ἀπαξ λεγόμενον, and the whole passage down to *subacti* (*subacto*) is full of difficulties. What is *fit ex loto sata*? Is *sata* nom. or abl.? Would *putri* agree with *milio* as the order of words suggests, or with *semine* as suggested by XIII. § 108? Again, is this bread the same as that described in XIII. § 108, Herodotus II. 92, Dioscorides IV. 113, Theophrastus IV. 8, 11? *Putri*, an emendation of Jan

XXVIII. We have also the lotometra,^a a plant derived from the lotus. From its rotted seed, which is like millet, are made by the shepherds in Egypt loaves that they knead mostly with water or milk. It is said that no bread is more healthful or lighter than this, so long as it is warm, but when cold it becomes heavy and difficult of digestion. It is an established fact that those who live on it are never attacked by dysentery, tenesmus, or any other disease of the bowels. Accordingly it is considered to be one of the remedies for such ailments.

XXIX. I have spoken more than once ^b of the *Heliotropium*, which turns round with the sun even on a cloudy day, so great a love it has for that luminary. At night it closes its blue flower as though it mourned.^c There are two varieties—*tricoccum* and *helioscopium*. The latter is the taller, although neither is more than half a foot in height, and sends out branches from a single ^d root. Its seed, enclosed in a pod, is gathered at harvest time. It grows nowhere but in a rich, well cultivated soil, but *tricoccum* grows everywhere. I find it said that, boiled, it is an agreeable sauce, that in milk it is a gentle laxative, and that a draught of the decoction is a most drastic purge. The juice of the taller plant is collected in summer at the sixth hour; it is mixed with wine, which makes it keep longer.

accepted by Detlefsen and Mayhoff, is doubtful, but a more convincing correction of the impossible *porri* of the MSS. has yet to be made.

^b See II. § 109, XVIII. § 252.

^c Or, "were afflicted with longing."

^d Or, with the reading *ima*, "from the bottom of the root." Pliny seems to have gone wrong in several details, or to be mixing up two plants.

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dolores sedat rosaceo admixto. verrucas cum sale tollit sucus e folio, unde nostri verrucariam herbam appellavere aliis cognominari effectibus digniorem. namque et serpentibus et scorpionibus resistit ex vino aut aqua mulsa, ut Apollophanes et Apollodorus tradunt. folia infantium destillationibus, quam si-riasim vocant, inlita medentur, item contractionibus, etiam si id comitialiter accidat. decocto quoque foveri os saluberrimum est. potum id pellit taenias et renium harenas. si cuminum adiciatur, calculos frangit. decoqui cum radice oportet, quae cum
60 foliis et hircino sebo podagris inlinitur. alterum genus quod tricoccum appellavimus et alio nomine scorpiuron vocatur, foliis non solum minoribus sed etiam in terram vergentibus. semen ei est effigie scorpionis caudae, quare nomen. vis ad omnia venenata et phalangia sed contra scorpiones praecipue inlita. non feriuntur habentes, et si terram surculo heliotropii circumscribat aliquis, negant scorpionem egredi, inposita vero herba aut uda omnino respersum protinus mori. seminis grana quattuor pota quartanis prodesse dicuntur, tria vero tertianis, vel si herba ipsa ter circumlata subiciatur
61 capiti. semen et venerem stimulat, cum melle panos discutit. verrucas hoc utique heliotropium radicitus

^a " Dog-star fever."

Mixed with rose oil it relieves headache. The juice from the leaf, with salt added, takes away warts; for which reason our countrymen have called it wart plant, although it is more worthy to have a name derived from its other properties. For taken in wine or hydromel it counteracts the poison of snakes and scorpions, according to the statements of Apollonius and Apollodorus. An application of the leaves cures the infantile catarrhs that are called siriasis,^a and also convulsions, even though caused by epilepsy. It is very healthful, too, to wash out the mouth with a decoction. A draught of the same expels tape-worms and gravel; if cummin be added, it breaks up stone. A decoction should include the root, which with leaves and he-goat suet is applied to gouty limbs. The other kind, called by us tricoccum and having the further name of scoriuron, has leaves which not only are smaller but also turn towards the ground. Its seed is shaped like a scorpion's tail, which accounts for its name. An application is of great efficacy against the poison of all venomous animals and spiders, but especially against that of scorpions. Those carrying it are never stung, and if with a sprig of heliotropium a circle be drawn on the ground round a scorpion, it is said that it never moves out, and moreover, that if the plant is put on a scorpion, or if a scorpion merely be sprinkled with the wet plant, it dies at once. Four grains of the seed taken in drink are said to be good for quartan ague, three grains however for tertian, or the plant itself may be carried three times round the patient and then placed under his head. The seed is also aphrodisiac, mixed with honey it disperses superficial abscesses. This helio-

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extrahit et excrescentia in sedibus. spinae quoque ac lumborum sanguinem corruptum trahit inlitum semen, et potum in iure gallinacei decoctum aut cum beta et lente. cortex seminis liventibus colorem reddit. Magi heliotropium in¹ quartanis quater, in tertianis ter adligari iubent ab ipso aegro precarique eum, soluturum se nodos liberatum, et iacere² non exempta herba.

- 62 XXX. Aliud adianto miraculum: aestate virescit, bruma non marcescit, aquas respuit, perfusum merumve sicco simile est—tanta dissociatio deprehenditur—unde et nomen a Graecis alioqui frutici topiario. quidam callitrichon vocant, alii polutrichon, utrumque ab effectu. tinguunt enim capillum et ad hoc decoquitur in vino cum semine apii adiecto oleo copiose,³ ut crispum densumque faciat; et
63 defluere autem prohibet. duo eius genera: candidius et nigrum breviusque. id quod maius est, polytrichon, aliqui trichomanes vocant. utrique ramuli nigro colore nitent, foliis felicis, ex quibus inferiora aspera ac fusca sunt, omnia autem contrariis pediculis densa ex adverso inter se,⁴ radix nulla. umbras petras parietumque aspergines ac fontium maxime

¹ in *add.* Mayhoff, C. F. W. Müller secutus.

² iacere *coni.* Mayhoff: facere *codd.*

³ copiose: . copioso *coni.* Mayhoff.

⁴ densa et adversa inter se contrariis pediculis *coni.* Mayhoff coll. Theophrasto VII. 14, 1: φύλλα δὲ μικρὰ σφόδρα καὶ πυκνὰ καὶ πεφυκότα καταντικρὺ ἀλλήλων, ῥίζα δὲ οὐχ ὑπεστὶ.

^a It is uncertain what this can mean. Perhaps dark, extravasated blood showing near the surface. Compare the "livid patches" of the next sentence.

^b ἀδιάντων, "water proof."

^c καλλίτριχον.

^d πολύτριχον.

tropium at any rate draws warts out by the root, as well as growths in the seat. Corrupt blood ^a also about the spine or in the loins is withdrawn by an application of the seed, and by a draught or decoction of it in chicken broth, or with beet and lentils. The husk of the seed restores the natural colour to livid patches. The Magi recommend that the patient himself should tie on himself heliotropium, four pieces if the ague be quartan and three if it be tertian, and to say in prayer that he will untie the knots only when the fever has left him, and to lie in bed without taking the plant off.

XXX. Maidenhair too is remarkable, but in other *Maidenhair* ways. It is green in summer without fading in winter; it rejects water; sprinkled or dipped it is just like a dry plant—so great is the antipathy manifested—whence too comes the name given by the Greeks ^b to what in other respects is a shrub for ornamental gardens. Some call it lovely hair ^c or thick hair,^d both names being derived from its properties. For it dyes the hair, for which purpose a decoction is made in wine with celery seed added and plenty of oil, in order to make it grow curly and thick; moreover it prevents hair from falling out. There are two kinds: one is whiter than the other, which is dark and shorter. The larger kind, thick hair, is called by some trichomanes.^e Both have sprigs of a shiny black, with leaves like those of fern, of which the lower are rough and tawny, but all grow from opposite footstalks, close set and facing each other; there is no root. It is mostly found on shaded rocks, walls wet with spray, especially the grottoes of fountains, and on boulders streaming

^a Mad on hair, i.e. with wild hair (?).

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specus sequitur et saxa manantia, quod miremur,
 64 cum aquas non sentiat. calculos e corpore mire
 pellit frangitque, utique nigrum, qua de causa potius
 quam quod in saxis nasceretur a nostris saxifragum
 appellatum crediderim. bibitur e vino quantum
 terni decerpere digiti. urinam¹ cient, serpentium
 et araneorum venenis resistunt, in vino decocti
 alvum sistunt. capitis dolores corona ex his sedat.
 contra scolopendrae morsus inlinuntur, crebro aufe-
 rendi ne perurant, hoc et in alopeciiis. strumas
 discutiunt furfuresque in facie et capitis manantia
 65 ulcera. decoctum ex his prodest suspiriosis et
 iocineri et lieni et felle subfusus et hydropicis.
 stranguriae inlinuntur et renibus cum absinthio.
 secundas cient et menstrua. sanguinem sistunt ex
 aceto aut rubi suco poti. infantes quoque exulcerati
 perunguntur ex iis cum rosaceo et vino prius. folium
 in² urina pueri inpubis, tritum quidem cum aphro-
 nitro et inlitum ventri mulierum ne rugosus fiat
 praestare dicitur. perdices et gallinaceos pugna-
 ciores fieri putant in cibum eorum additis, pecorique
 esse utilissimos.

¹ *Ante urinam excidisse utriusque ramuli putat Mayhoff.*

² *prius. folium in vulg.: virus folii in Mayhoff.*

^a Referring to the first sentence of the chapter.

^b Stones in the bladder are *calculi* not *saxa*.

^c The change to the masculine plural is odd. Perhaps Pliny took *callitrichon* and *polytrichon* as masculines. The other alternative is to understand *ramuli* (see § 63), which Mayhoff thinks has fallen out here.

^d The vulgate reading can be translated and is good sense, but the conjecture of Mayhoff makes it possible to keep the *folii* of the MSS. It would be translated: "with rose oil."

with water—strange places for a plant that is unaffected by water!^a It is remarkably good for expelling stones from the bladder, breaking them up, the dark kind does so at any rate. This, I am inclined to believe, is the reason why it is called saxifrage ^b (stone-breaker) rather than because it grows on stones. It is taken in wine, the dose being what can be plucked with three fingers. Diuretic, the maidenhairs ^c counteract the venom of snakes and spiders; a decoction in wine checks looseness of the bowels; a chaplet made out of them relieves headache. An application of them is good for scolopendra stings, though it must be taken off repeatedly for fear of burns. The same treatment applies to fox-mange also. They disperse scrofulous sores, scurf on the face and running sores on the head. A decoction of them is beneficial for asthma, liver, spleen, violent biliousness and dropsy. With wormwood an application of them is used in strangury and to help the kidneys. They promote the after-birth and menstruation. Taken in vinegar or black-berry juice they check haemorrhage. Sore places too on babies are treated by an ointment of maidenhair with rose oil, wine being applied first.^d The leaves steeped in the urine of a boy ^e not yet adolescent, if they be pounded with saltpetre and applied to the abdomen of women, prevent the formation of wrinkles. It is thought that partridges and cockerels become better fighters if maidenhair be added to their food, and it is very good for cattle.

The slimy juice of the leaves added to the urine . . . and beaten up with saltpetre.” But *virus tritum* is strange.

^e Perhaps child of either sex is meant.

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- 66 XXXI. Picris ab insigni amaritudine cognominatur, ut diximus, folio rotundo. tollit eximie verrucas. thesium quoque non dissimili amaritudine est, sed purgat alvum, in quem usum teritur ex aqua.
- 67 XXXII. Asphodelum de clarissimis herbarum, ut quod heroion aliqui appellaverint, Hesiodus et in silvis nasci dixit, Dionysius marem ac feminam esse. defectis corporibus et phthisicis constat bulbos eius cum tisana decoctos aptissime dari, panemque ex his cum farina subactis saluberrimum esse. Nicander et contra serpentes ac scorpiones vel caulem quem anthericum vocavimus vel semen vel bulbos dedit in vino tribus drachmis substravitque somno contra hos
- 68 metus. datur et contra venenata marina et contra scolopendras terrestres. cocleae mire in Campania caulem eum persequuntur et sugendo arefaciunt. folia quoque inlinuntur venenatorum vulneribus ex vino. bulbi nervis articulisque cum polenta tinsi inlinuntur. prodest et concisis ex aceto lichenas fricare, item ulceribus putrescentibus ex aqua imponere, mammarum quoque et testium inflammationibus.
- 69 decocti in faece vini oculorum epiphoris supposito linteolo medentur. fere in quocumque morbo magis decoctis utuntur, item ad tibiatarum taetra ulcera rimasque corporum quacumque in parte farina arefactorum. autumno autem colli-

^a Picris is *Urospermum picroeides* and thesium *Corydalis densiflora*.

^b See XXI. § 105.

^c *Theriaca* 534.

^d See XXI. § 109.

^e See p. 325, n. c.

XXXI. *Picris* ^a is so called because of its remarkable *Picris*. bitterness, as I have already stated,^b and has a round leaf. It is excellent for the removal of warts. Thesium too is of a like bitterness, but is a strong *Thesium* purgative, for which use it is pounded in water.

XXXII. *Asphodel* is one of the most famous *Asphodel*. plants, so that some have styled it the plant of the heroes; Hesiod said that it also grows in woods, Dionysius that it may be male or female. It is agreed that its bulbs boiled down with barley water are very suitable for wasting bodies and consumptives, and that kneaded with meal they make a very wholesome bread. Nicander ^c too prescribed for the poison of snakes and scorpions either the stalk which I have called ^d anthericum, or the seed, or the bulbs, the dose being three drachmae taken in wine, and he would have them spread under the sleeping place, should there be any fear of venomous creatures. It is also prescribed for poisoning by sea creatures and by land scolopendras. It is strange how in Campania the snails seek its stalk and by sucking shrivel it up. The leaves too in wine are applied to the wounds of venomous creatures. The bulbs are pounded and applied with pearl barley to the sinews and joints. It is a good plan to chop them up and to rub lichen ^e with them in vinegar; also to put them in water on putrescent sores, and on inflammations too of the breasts and testicles. Boiled down in lees of wine and dabbed on from below with a piece of lint, they cure fluxes of the eyes. In nearly every disease the bulbs are usually boiled before use, but for foul sores on the shins, and for cracks in any part of the body they are dried and reduced to powder. Autumn is the time they are

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- guntur, cum plurimum valent. sucus quoque ex tuis expressus aut decoctis utilis fit corporis dolori cum melle, idem odorem corporis iucundum affec-
- 70 tantibus, cum iri arida et salis exiguo. folia et supra dictis medentur et strumis, panis, ulceribus in facie decocta in vino. cinis e radice alopecias emendat et rimas pedum sedisque, decoctae radice in oleo sucus perniones et ambusta. et gravitati aurium infunditur, a contraria aure in dolore dentium. prodest et urinae pota modice radix et menstruis et lateris doloribus, item ruptis, convulsis, tussibus, draehmae pondere in vino pota. eadem et vomitiones adiuvat commanducata. semine sumpto tur-
- 71 batur venter. Chrysermus et parotidas in vino decocta radice curavit, item strumas admixta cachry ex vino. quidam aiunt, si inposita radice pars eius in fumo suspendatur quartoque die solvatur, una cum radice arescere strumam. Diocles ad podagras utroque modo, cocta crudaque usus est, ad perniones decocta ex oleo; dedit¹ et suffusis felle in vino et hydropicis. venerem quoque concitari cum vino et melle perunctis aut bibentibus tradidere.
- 72 Xenocrates et lichenas, psoras, lepras radice in aceto decocta tolli dicit, item sicca cum² hyoscyamo et pice

¹ est, ad perniones decocta ex oleo; dedit: *sic dist. Mayhoff*: est. ad perniones decoctam ex oleo dedit *Deilefsen*.

² sicca cum *Deilefsen*: suco cum *Mayhoff*: si coccum *codd.* si cocta sit cum *vulg.*

^a It is not certain what this was; perhaps the fruit of *Lecokia cretica*. See Theophrastus IX. 11, 10, where the libanotis is described.

gathered, when their power is at its best. The juice also extracted from crushed or boiled bulbs is, mixed with honey, good for an aching body; and the same, with dried iris and a little salt, helps those who are nicely particular about the odour of their persons. The leaves, boiled down in wine, cure both the complaints mentioned above and also scrofulous swellings, superficial abscesses and sores on the face. The ashes of the root are a remedy for fox-mange and for cracks on the feet or seat, and the juice of the root boiled in oil for chilblains and burns. This is poured into the ears for deafness, and for toothache into the ear opposite to the pain. A moderate dose, one drachma, of the root, taken in wine, is diuretic and an emmenagogue, besides being good for pain in the side, ruptures, convulsions and coughs. Chewing the root acts as an emetic; the seed if taken internally disturbs the bowels. Chrysermus treated parotid abscesses also by a decoction of the root in wine, and scrofulous swellings by the decoction added to cachry^a in wine. Some say that if, after applying the root, a part of it be hung in the smoke and not taken down before the fourth day, as the root dries up the scrofulous swelling subsides. Diocles used the root for gouty conditions in either way, boiled or raw, and for chilblains a decoction in oil. He prescribed it in wine for violent biliousness and for dropsy. It has also been held that it is aphrodisiac if, with wine and honey, it is used as an ointment or taken as a medicine. Xenocrates also says that a decoction of the root in vinegar removes lichen, itch-scab and leprous sores, further that dried and mixed with henbane and melted pitch it does the same for

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liquida, alarum quoque et feminum vitia, et capillum crispiorum fieri, raso prius capite, si radice ea fricetur, Simos lapides renium in vino decocta potaque eximi. Hippocrates semine ad impetus lienis dari censet. iumentorum quoque ulcera ac scabiem radix inlita aut decoctae sucus ad pilum reducit. mures eadem fugantur, caverna praeclusa moriuntur.

- 73 XXXIII. Asphodelum ab Hesiodo quidam halimon appellari existimavere, quod falsum arbitror. est enim suo nomine halimon, non parvi et ipsum erroris inter auctores. alii enim fruticem esse dicunt densum, candidum, sine spina, foliis oleae, sed mollioribus, coqui haec ciborum gratia, radice tormina discuti drachmae pondere in aqua mulsa pota, item
74 rupta, convulsa. alii olus maritimum esse dixere salsum et inde nomen, foliis in rotunditatem longis, laudatum in cibis. duorum praeterea generum, silvestre et mitius, utrumque prodesse dysintericis etiam exulceratis cum pane, stomacho vero ex aceto. ulceribus vetustis inlini crudum et vulnere recentium impetus lenire et luxatorum pedum ac vesicae dolores. silvestri tenuiora folia, sed in iisdem remediis effectus maiores et in sananda hominum ac
75 pecorum scabie. praeterea nitorem corpori fieri

^a From the Greek word ἅλς (salt, or sea).

^b Or, "shock". See also p. 382, n. a.

unpleasant odour from armpits and thighs, and that the hair grows again more curly if the scalp be first shaved and then rubbed with this root; Simos says that a draught of the decoction in wine removes stone of the kidneys. Hippocrates holds that for attacks of the spleen it should be given in the form of seed. When beasts of burden too have sores or itch-scab, an application of the root or of a decoction of it restores the hair that has been lost. The root keeps away mice, which also die if their holes be closed up with it.

XXXIII. Some have thought that Hesiod means *Halimon*. halimon when he speaks of asphodel, but this view I think is wrong. For halimon is a separate plant with a name of its own, which itself has been the cause of no small confusion among our authorities. For some describe it as a thick shrub, pale, free from thorns, with the leaves of an olive, only softer, saying that these are boiled to be used as food, and that the root, taken in hydromel, the dose being a drachma by weight, is good for colic, and also for ruptures and convulsions. Others have said that it is a salty vegetable of the sea-shore^a (hence its name), with long, rounded leaves, and highly esteemed as a food. They add that of the two kinds, wild and cultivated, both are good, taken with bread, for dysentery, even with ulceration, and also, in vinegar, for the stomach; that it is applied raw to chronic ulcers, soothes the smart^b of recent wounds and of sprained ankles, as well as pains of the bladder; that the wild kind has thinner leaves, but greater effects when used for the same purposes as the other, and in healing itch in both man and beast; moreover that the skin becomes clearer and the teeth whiter,

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dentibusque candorem, si fricentur radice ea, semine linguae subdito sitim non sentiri. hoc quoque mandi et utraque etiam condiri. Crateuas tertium quoque genus tradidit longioribus foliis et hirsutioribus, odore cupressi, nasci sub hedera maxime; prodesse opisthotonis, contractionibus nervorum tribus obolis in sextarium aquae.

- 76 XXXIV. Acanthi topiariae et urbanae herbae lato longoque folio crepidines marginum adsurgentiumque pulvinorum toros vestientis duo genera sunt, aculeatum et crispum, quod brevius, alterum leve, quod aliqui paederota vocant, alii melamphyllum. huius radices ustis luxatisque mire prosunt, item ruptis, convulsis, et phthisin metuentibus, ideo coctae ¹ cibo, maxime e ² tisana. podagris quoque inlinuntur tritae et calefactae.³

- 77 XXXV. Bupleuron in sponte nascentium olerum numero Graeci habent, caule cubitali, foliis multis longisque, capite aneti, laudatum in cibis ab Hippocrate, in medicina a Glaucone et Nicandro. semen contra serpentes valet. folia ad secundas feminarum vel sucum ex vino inlinunt, et strumis folia cum sale et vino. radix contra serpentes datur in vino et urinae ciendae.

¹ ideo coctae E *Detlefsen* : id cocte G : id coctae *Mayhoff* : incoctae *vulg.*

² e *addo*, quod *coni. Mayhoff.*

³ *Post calefactae invenitur in codd. calidis. Del. Detlefsen, sed e sale calidis coni. Io. Müller, quem secutus est Mayhoff.*

^a *I.e.*, the spiny bear's-foot of Greece and the smooth bear's-foot of Roman gardens.

^b The meaning of this sentence is plainer after reading XIX. ch. 20, where Pliny describes how a pleasure garden was laid out.

if its root be used to rub them with, and thirst is not felt by those who put the seed under their tongue; that this kind too is chewed, and both kinds preserved as well. Crateuas has mentioned a third kind also, with longer and more hairy leaves and the smell of cypress, as growing chiefly under ivy and being good for opisthotonic tetanus and cramp, the dose being three oboli to a sextarius of water.

XXXIV. There are two kinds^a of *acanthus*, a plant *Acanthus.* of the ornamental garden and of the city, which has a broad, long leaf, and covers the banks of borders and the flat tops of the raised portions of gardens.^b One is thorny and curled, which is the shorter; the other is smooth, and is called by some *paederos*, by others *melamphyllum*. Its roots are wonderfully good for burns, sprains, ruptures, convulsions, and those threatened with consumption; for which reason they are boiled for food, mostly in barley water.^c For gouty limbs too they are applied, pounded and hot.^d

XXXV. *Bupleuron* is considered by the Greeks to *Bupleuron.* be among the vegetables growing wild. It has a stem a cubit high, many and long leaves, and the head of dill. Hippocrates recommends it as a food, Glauco and Nicander^e as a medicine. Its seed counteracts the poison of serpents. The leaves or the juice they apply in wine for the removal of the after-birth, and the leaves with salt and wine for scrofulous swellings. Its root is given in wine for snake bites and as a diuretic.

^a Perhaps it is best to take *cibo* as dative and add *e* before *tisana*; to take *cibo* as ablative gives a harsh construction. For the dative compare Pliny's use of *potui* "for drink" (§ 49, *e.g.*).

^d The emendation of J. Müller means "in hot fomentations with salt."

^e *Theriaca* 586.

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- 78 XXXVI. Buprestim magna inconstantia Graeci in laudibus ciborum etiam habuere, iidemque remedia tamquam contra venenum prodiderunt. et ipsum nomen indicio est boum certe venenum esse, quos dissilire degustata fatentur. quapropter nec de hac plura dicemus. est vero causa quare venena monstremus inter gramineas coronas,¹ nisi libidinis causa expetenda alicui videtur, quam non aliter magis accendi putant quam pota ea?
- 79 XXXVII. Elaphoboscon ferulaceum est, geniculatum digiti crassitudine, semine corymbis dependentibus silis effigie, set non amaris, foliis olusatri.² et hoc laudatum in cibus—quippe etiam conditum prorogatur—ad urinam ciendam, lateris dolores sedandos, rupta, convulsa sananda, inflationes discutiendas colique tormenta, contra serpentium omniumque aculeatorum ictus, quippe fama est hoc pabulo cervos resistere serpentibus. fistulas quoque radix nitro addito inlita sanat, siccanda autem in eo usu prius est, ne suco suo madeat, qui contra serpentium ictus non facit deteriorem eam.
- 80 XXXVIII. Scandix quoque in olera silvestri a Graecis ponitur, ut Ophion et Erasistratus tradunt.

¹ *Post coronas exclamationem indicat C. F. W. Müller, quem secutus est Mayhoff.*

² *Post olusatri comma Dellefsen, punctum Mayhoff, qui etiam quippe . . . prorogatur in parenthesi ponit.*

^a The name *βούπρηστις*, "that makes oxen explode," was given to a beetle which, eaten by oxen, caused them to die. Pliny, however, says this of the plant.

^b The negative *nec* is probably "not either" ("I shall not speak about this either"). But it possibly is the rare *nec* = *non*.

^c With C. F. W. Müller's punctuation: "There is every

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XXXVI. Buprestis the Greeks with great inconsistency went to the length of including among their praised foods, and yet they prescribed correctives of it as though it were poison, and the mere name implies that it is poison to oxen at any rate,^a which it is allowed burst when they taste it. Wherefore it is one ^b of the plants about which I shall not speak at length. Is there indeed a reason why I should describe poisons when dealing with grass crowns, unless there be someone who thinks that for the sake of lust buprestis is desirable, which taken in drink is the most potent aphrodisiac known? ^c

XXXVII. Elaphoboscon (wild parsnip) is a plant like fennel-giant, with a jointed stem of the thickness of a finger, the seed in clusters hanging down like hartwort, but not bitter, and with the leaves of olusatrum.^d This too has been praised as a food—in fact it is even preserved for future use—being good as a diuretic, for soothing pains in the side, for curing ruptures and spasms, for dispersing flatulence and colic, and for the wounds of snakes and of all stinging creatures—in fact report has it that deer by eating it fortify themselves against snakes.^e Fistulas too are cured by the application of the root with saltpetre added, but when used in this way it must first be dried, so that it may not be soaking with its own juice, although the latter does not impair its efficacy as a remedy for snake bites.

XXXVIII. Scandix (chervil) too is classed by the Greeks as a wild vegetable, as Ophion and Erasis-tratus report. A decoction of it too tones up loose

reason why . . . crowns! But perhaps someone thinks that, etc.”

^d Alexanders.

^e The name means “deer-feeding.”

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- item decocta alvum sistit, semine singultus confestim ex aceto sedat. inlinitur ambustis, urinas ciet. decoctae sucus prodest stomacho, iocineri, renibus, vesicae. haec est quam Aristophanes Euripidi poetae obicit ioculariter: matrem eius ne olus
- 81 quidem legitimum venditasse, sed scandicem. eadem erat enthriscum, si tenuiora folia et odoratiora haberet. peculiaris laus eius, quod fatigato venere corpori succurrit marcentesque iam senio coitus excitat. sistit profluvia alba feminarum.
- 82 XXXIX. Et iasine olus silvestre habetur, in terra repens, cum lacte multo, florem fert candidum, conchylum¹ vocant. et huius eadem commendatio ad stimulandos coitus. cruda ex aceto in cibis et mulieribus lactis ubertatem praestat. salutaris est phthisin sentientibus. infantium capiti inlita nutrit capillum tenacioremque eius cutem efficit.
- 83 XL. Estur et caucalis feniculo similis, brevi caule, flore candido, cordi utilis. sucus quoque eius bibitur, stomacho perquam commodatus et urinae calculisque et harenis pellendis et vesicae pruritibus. extenuat et lienis, iocineris reniumque pituitas. semen menses feminarum adiuvat bilemque a partu siccatur. datur et contra profluvia geniturae viris. Chrysippus et conceptionibus eam putat conferre multum. bibitur in vino ieiunis. inlinitur et contra venena marinarum, sicut Petrichus in carmine suo significat.

¹ conchylum *Urlichs*: concilium *aut* concylium *codd.*

^a *Acharnians* 478: σκάνδικά μοι δὸς μητρὸθεν δεδεγμένος.

^b Really a variety of scandix (*Scandix australis*).

bowels, its seed in vinegar immediately checks hiccough. It is applied to burns and is diuretic. The juice of the decoction is good for stomach, liver, kidneys, and bladder. This is the plant that Aristophanes^a uses to poke fun at the poet Euripides, implying that his mother had not been a seller of even proper vegetables, but only of scandix. It would be the same sort of plant as enthriscum,^b were its leaves thinner and more fragrant. Its special merit is that it gives strength to a body exhausted by sexual indulgence, and revives sexual virility when flagging through old age. It checks leucorrhoea in women.

XXXIX. Iasine (bindweed?) too is considered to *Iasine*. be a wild vegetable. It creeps on the ground, is full of milky juice, and bears a white flower called conchylum. This plant too has the same merit of exciting to sexual intercourse. Eaten raw in vinegar with food it brings also a rich supply of milk to nursing mothers. It is health-giving to those suffering from consumption. Applied to the head of babies it makes the hair grow, and the scalp more retentive of it.

XL. Caulis too is edible, a plant like fennel, *Caulis* with a short stem and a white flower. It is good for *(Fordylium apulum)*. the heart; its juice too is taken as a draught, being especially good for the stomach and urine, for expelling stone and gravel, and for irritation of the bladder. It alleviates also catarrhs of the spleen, liver and kidneys. The seed promotes menstruation, and dries up bilious secretions after childbirth. It is also prescribed for seminal fluxes in men. Chrysippus is also of opinion that it greatly helps conception. It is taken in wine fasting. It is also applied to the wounds caused by poisonous sea creatures, as Petrichus points out in his poem.

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- 84 XLI. His adnumerant et sium¹ latius apio, in aqua nascens, pinguius nigriusque, copiosum semine, sapore nasturtii. prodest urinis, renibus, lienibus mulierumque mensibus, sive ipsum in cibo sumptum sive ius decocti sive semine in vino drachmis duabus. calculos rumpit aquisque quae gignunt eos resistit. dysintericis prodest infusum, item inlitum lentigini et mulierum vitis in facie noctu inlitum, lomentoque² cutem emendat et ramices lenit, equorum etiam scabiem.
- 85 XLII. Syllibum chamaeleonti albo similem, aequae spinosam, ne in Cilicia quidem aut Syria aut Phoenice, ubi nascitur, coquere tanti est. ita operosa eius culina traditur. in medicina nullum usum habet.
- 86 XLIII. Scolymum quoque in cibos recepit oriens et alio nomine limonian appellavit. frutex est numquam cubitali altior cristis³ foliorum ac⁴ radice nigra, sed dulci, Eratostheni quoque laudata in pauperi cena. urinam ciere praecipue traditur, sanare lichenas et lepras ex aceto, venerem stimulare
- 87 in vino⁵ Hesiodo et Alcaeo testibus, qui florente ea cicadas acerrimi cantus esse et mulieres libidinis

¹ et sium *Brotier*: esium *codd.*

² lomentoque *Urlichs, Detlefsen, Mayhoff*: momentoque *plurimi codd.*: *Mayhoff* pergit: "sed exspectes cum lomento-que vel lomentoque adiecto (mixto) . . . an fovendoque?"

³ cristis *Detlefsen*: cristisque *d vulg.*: tristis *G*: tristisque *V Mayhoff*.

⁴ ac *aliquot codd. vulg. Detlefsen*: acu *dR*: aculeis *coni. Mayhoff*.

⁵ invenio *coni. Warmington*.

^a This reading of *Brotier* is strongly confirmed by *Dioscorides* II. 127, *σίων φύεται ἐν τοῖς ὕδασι κ.τ.χ.*

^b That is, the leaves are broader.

XLI. With these is also classed sium,^a broader ^b *Sium* than celery, growing in water, rather thick and dark, with an abundance of seed and the taste of cress. It is good for the urine, kidneys, spleen, and for menstruation, whether it is taken as food, just as it is, or in the form of a decoction, or the seed may be given with wine, the dose being two drachmae. It breaks up stone, and neutralizes the water that causes them. An infusion is good for dysentery, and a liniment of it for freckles. An application at night removes spots from women's faces, while made into ointment it clears the skin, soothes hernia, and is a good dressing for scab in horses.

XLII. Syllibus, a plant like white chamaeleon, and *Syllibus*. equally prickly, is not thought to be worth boiling even in Cilicia or Syria or Phoenicia, the places where it grows, so troublesome is the cooking of it said to be. As a medicine it is of no use at all.

XLIII. Scolymus too has been adopted as a food *Scolymus* ^{(golden} in the East, where it has the further name of limonia. ^{thistle).} It is a shrub never more than a cubit high, with tufts of leaves ^c and a dark but sweet root; Eratosthenes too praises it as a valuable food for those of moderate means. It is said to be highly diuretic, to cure lichen and leprous sores when applied in vinegar, and according to Hesiod ^d and Alcaeus, to be an aphrodisiac when taken in wine. They have written that when it is in blossom the song of the cricket is

^c With the reading of Mayhoff: "a nuisance because of its prickly leaves."

^d See *Works*, 582-8, where Goettling remarks: "Sed vide, quam incertus hic auctor sit Plinius. De scolymo in vinum iniiciendo ne verbum quidem Hesiodus neque is, quem praeterea huius rei testem adsciscit, Alcaeus." So Warrington suggests *invenio* "I find" for *in vino* "taken in wine."

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avidissimas virosque in coitum pigerrimos scripsere, velut providentia naturae hoc adiumento tunc valentissimo. item graveolentiam alarum emendat radicis emedullatae uncia, in vini Falerni heminis tribus decocta ad tertias et a balineo ieiuno itemque post cibum cyathis singulis pota. mirum est quod Xenocrates promittit experimento, vitium id ex alis per urinam effluere.

- 88 XLIV. Estur et soncos—ut quem Theseo apud Callimachum adponat Hecale—uterque, albus et niger. lactucae similes ambo, nisi spinosi essent, caule cubitali, anguloso, intus cavo, sed qui fractus copioso lacte manet. albus, cui e lacte nitor, utilis orthopnoicis lactucarum modo ex embammate. Erasistratus calculos per urinam pelli eo monstrat et
- 89 oris graveolentiam commanducato corrigi. sucus trium cyathorum mensura in vino albo et oleo calefactus adiuvat partus ita ut a potu ambulent gravidae. datur et in sorbitione. ipse caulis decoctus facit lactis abundantiam nutricibus coloremque meliorem infantium, utilissimus his quae lac sibi coire sentiant. instillatur auribus sucus, calidusque in stranguria bibitur cyathi mensura et in stomachi rosionibus cum semine cucumeris nucleisque pineis. inlinitur et
- 90 sedis collectionibus. bibitur contra serpentes scorpionesque, radix vero inlinitur. eadem decocta in

^a A poor woman who entertained Theseus on one of his expeditions. Cf. Ovid, *Remedia amoris*, 747.

shrillest, women are most amorous and men most backward in sexual unions, as though it were through Nature's providence that this stimulant is at its best when badly needed. Offensive odour from the armpits is corrected by an ounce of the root, without the pith, in three heminae of Falernian wine boiled down to one third, to be taken fasting after the bath and again after food, the dose being a cyathus at a time. Xenocrates assures us of a remarkable thing, that he has proved by experiment, that the offensive smell passes off from the armpits by way of the urine.

XLIV. Sow-thistle too is edible—at any rate *Sow-thistle.* Callimachus makes Hecale^a set it before Theseus—both the pale kind and the dark. Both are like lettuce, except that they are prickly, with a stem a cubit high, angular and hollow inside, which on being broken streams with a milky juice. The pale kind, which shines because of the milk in it, is good for asthma if taken with salad-dressing as is lettuce. Erasistratus informs us that it carries away stone in the urine, and that to chew it purifies foul breath. Three cyathi of the juice warmed in white wine and oil aid delivery, but the expectant mother must take a walk immediately after drinking it; it is also given in broth. A decoction of the stem itself makes the milk abundant in nurses and improves the complexion of the babies, being very useful to those women who are subject to curdling their milk. The juice is injected into the ears, and a cyathus of it is drunk warm for strangury, for gnawing pains of the stomach with cucumber seed and pine nuts. It is used also externally for abscesses at the anus. It is taken in drink for the poison of snakes and scorpions, but the root is used as an external application.

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oleo, punici mali calyce, aurium morbis praesidium est. haec omnia ex albo. Cleemporus nigro prohibet vesci ut morbos faciente, de albo consentiens. Agathocles etiam contra sanguinem tauri demonstrat sucum eius, refrigeratorium tamen vim esse convenit nigro et hac causa inponendum cum polenta. Zenon radicem albi in stranguria suadet.

- 91 XLV. Condriion sive condrilla folia habet intubi, circumrosis similia, caulem minus pedalem, suco madentem amaro, radice fabae simili, aliquando numerosa. habet proximam terrae masticen tuberculo fabae, quae adposita feminarum menses trahere dicitur. tusa cum radicibus tota dividitur in pastillos contra serpentes argumento probabili, siquidem mures agrestes laesi ab his hanc esse dicuntur. sucus ex vino coctae alvum sistit. eadem palpebrarum pilos inordinatissimos pro cummi efficacissime regit. Dorotheus stomacho et concoctionibus utilem carminibus suis pronuntiavit. alioqui feminis et oculis generationique virorum contrariam putavere.

^a Bull's blood was used in prescriptions (XXVIII. §§ 177, 217, 220, 241), sometimes with (real or imaginary) serious consequences. Remedies are given for poisoning from its use in XX. §§ 25, 94; XXII. § 90; XXIII. § 128; XXVIII. § 102; XXXI. § 120.

^b This form of the name, supported by all the MSS., is not in the dictionaries.

^c That this is the meaning of the strange *tuberculo fabae* is clear from Dioscorides II. 133, *μεγέθει κναμαῖα, ἃ τινα προστεθέντα . . . ἐμμηνα ἄγει*.

^d It is uncertain whether this refers to all the plant (*tota*, sc. *herba* or *condrilla*) or to all the *mastice*. The former alter-

Boiled in oil and in the skin of a pomegranate the root is also a remedy for complaints of the ears. All these preparations must be made from the white kind. Cleemporus says that the dark kind must not be eaten, because it causes diseases, but he agrees to the use of the white. Agathocles asserts that its juice counteracts even the poison of bull's^a blood, yet since it is agreed that the dark kind has cooling properties, pearl barley must therefore be added to the application. Zeno recommends the root of the white kind for strangury.

XLV. Condriion^b or condrilla has leaves like those *Condrilla*. of endive, eaten away as it were round the edges, a stem less than a foot and moist with a bitter juice, and a root like a bean, occasionally manifold. Next to the ground it grows a gum, an excrescence the size of a bean,^c a pessary of which is said to promote menstruation. The whole^d with the roots is pounded and divided into lozenges as an antidote for snake bites, for which treatment good reason can be adduced, for field mice wounded by snakes are said to eat it. A decoction of the plant in wine checks looseness of the bowels. The same makes an excellent substitute for gum to keep the eye-lashes tidy, however disordered these may be. Dorotheus declares in his verses that it is good for the stomach and the digestion.^e For the rest, it has been supposed to be bad for women, for the eyes, and for the virility of men.

native is probably right here, but later on, where a similar grammatical ambiguity occurs, *eadem . . . pilos inordinatissimos pro cummi regit* must surely refer to the gummy mastic.

^a *Concoctiones* may mean: "maturing of abscesses." Cf. note on § 123. The plural supports this view, but the context (*stomacho*) the meaning "digestion."

PLINY : NATURAL HISTORY

- 92 XLVI. Inter ea quae temere manduntur et boletos merito posuerim, opimi quidem hos cibi, sed immenso exemplo in crimen adductos, veneno Tiberio Claudio principi per hanc occasionem ab coniuge Agrippina dato, quo facto illa terris venenum alterum sibi que ante omnes Neronem suum dedit. quorundam ex his facile noscuntur venena diluto rubore, rancido aspectu, livido intus colore, rimosa stria, pallido per
93 ambitum labro. non sunt haec in quibusdam, siccique et veri similes veluti guttas in vertice albas ex tunica sua gerunt. vulvam enim terra ob hoc prius gignit, ipsum postea in vulva, ceu in ovo est luteum. nec tunicae minor gratia in cibo infantis boleti. rumpitur haec primo nascente, mox in-
94 crescente in pediculi corpus absumitur, rarum umquam geminis¹ ex uno pede. origo prima causaque e limo et acescente suco madentis terrae aut radicis fere glandiferae,² initioque spuma lentior, dein corpus membranae simile, mox partus, ut diximus. illa pernicialia quae probandi alea!³ si caligaris clavus

¹ rarum umquam geminis *codd.*, *Detlefsen* : raroque *vulg.* : rarumque ut geminus *Mayhoff*.

² glandiferae *vulg.*, *Mayhoff* : grandiferae aut grandis *codd.* grandis *Detlefsen*.

³ quae probandi alea *Gronovius*, *Detlefsen* : quot probandi alia aliis signa *Mayhoff* : quod plurimi *codd.* : alia alias *multi*.

^a Or possibly : "which people eat without enough care."

^b The phrase *rimosa stria* is difficult. Perhaps Pliny means that the so-called gills form deep clefts; or perhaps he refers to the top of the cap.

^c With *Detlefsen's* reading : "out of a stout root," or "out of the root of a tall tree." *Fere* may account for the

XLVI. Among the things which it is rash ^a to eat I would include mushrooms, as although they make choice eating they have been brought into disrepute by a glaring instance of murder, being the means used to poison the Emperor Tiberius Claudius by his wife Agrippina, in doing which she bestowed upon the world, and upon herself in particular, yet another poison—her own son Nero. Some of the poisonous mushrooms are easily recognized by their being of a pale-red colour, of a putrid appearance and of a leaden hue inside; the furrows of the striated parts are mere chinks,^b with a pale rim all round the edge. Not all the poisonous kinds are like this, and there is a dry sort, similar to the genuine mushroom, which shows as it were white drops on the top, standing out of its outer coat. The earth in fact produces first a matrix for this purpose, and afterwards the mushroom itself in the matrix, like the yoke inside the egg; and the baby mushroom is just as fond of eating its coat as is the chick. The coat cracks when the mushroom first forms; presently, as the mushroom gets bigger, the coat is absorbed into the body of the foot-stalk, two heads rarely ever springing from one foot. The first origin and cause of mushrooms is the slime and the souring juice of the damp ground, or often of the root of acorn-bearing trees,^c and at first is flimsier than froth, then it grows substantial like parchment, and then the mushroom, as I have said, is born. How chancy a matter it is to test these deadly-plants! ^d If a boot nail, a piece of

*Mushrooms
and toad-
stools.*

loss of *-ferae*, or it should perhaps be deleted as being due to dittography. See XVI. § 33.

^a With Mayhoff's reading: "How many signs—different for different people—there are to test these deadly plants!"

PLINY : NATURAL HISTORY

ferrive aliqua robigo aut panni marcor adfuit nascenti, omnem ilico sucum alienum saporemque in venenum concoquit.¹ deprehendisse qui nisi agrestes possunt
 95 atque qui² colligunt ipsi? alia vitia ne hi quidem,³ si serpentis caverna iuxta fuerit, si patescentem primo adhalaverit, capaci venenorum cognatione ad virus accipiendum. itaque caveri conveniat prius quam se condant serpentes. signa erunt tot herbae, tot arbores fruticesque ab emersu earum ad latebram usque vernantes, et vel fraxini tantum folia nec⁴ postea nascentia nec ante decidentia. et boletis quidem ortus occasusque omnis intra dies septem est.
 96 XLVII. Fungorum lentior natura et numerosa genera, sed origo non nisi ex pituita arborum. tutissimi qui rubent callo minus diluto rubore quam boleti, mox candidi velut apice flaminis insignibus pediculis, tertium genus suilli venenis accommodatissimi. familias nuper interemere et tota convivia, Annaeum Serenum praefectum Neronis vigilum et tribunos centurionesque. quae voluptas tanta tam
 97 ancipitis cibi? quidam discrevere arborum generi-

¹ concoquit *codd.*: concoqui *Mayhoff*, qui et punctum delet.

² qui *multi* quae *aliquot codd.*

³ ne hi quidem *Io. Müller*: ne quidem *codd.*: equidem *coni. Dellefsen.*

⁴ nec delere vult *Warmington.*

^a Warmington suggests deleting the first *nec*, on the ground that the ash gets its leaves *late* in spring: "whose leaves grow after, and do not fall before, etc."

rusty iron, or a rotten rag was near when the mushroom started to grow, it at once absorbs and turns into poison all the moisture and flavour from this foreign substance. Who can be trusted to have detected the affected specimens except countryfolk and those who actually gather them? Other infections even these cannot detect; for instance, if the hole of a serpent has been near the mushroom, or should a serpent have breathed on it as it first opened, its kinship to poisons makes it capable of absorbing the venom. So it would be well not to eat mushrooms until the serpent has begun to hibernate. Indications of this will be given by the many plants, trees, and shrubs, that are always green from the time that the serpent comes out from his hole to the time that he buries himself in it; or even the ash tree will serve, whose leaves do not grow after, nor fall before, the hibernating period.^a And of mushrooms indeed the whole life from beginning to end is not more than seven days.

XLVII. The texture of fungi is rather flabby, and there are several kinds of them, all derived only from the gum that exudes from trees. The safest have firm red flesh less pale than that of the mushroom; next comes the white kind, the stalk of which is distinguished by its ending in a kind of flamen's cap; a third kind, hog fungi, are very well adapted for poisoning. Recently they have carried off whole households and all the guests at banquets; Annaeus Serenus, for instance, Captain of Nero's Guards, with the tribunes and centurions. What great pleasure can there be in such a risky food? Some have classified fungi according to the kind of tree on which they grow, one class including those growing on

Tree-fungi.

PLINY : NATURAL HISTORY

- bus, fico, ferula et cummim ferentibus, non item ¹ taxo, robore, cupresso, ut diximus. sed ista quis spondet in venalibus? omnium colos lividus. hic habebit veneni argumentum quo similior fuerit arborum cortici.² adversus haec diximus remedia dicemusque.
- 98 interim sunt aliqua et in iis.³ Glaucias stomacho utiles putat boletos. siccantur pendentes suilli, iunco transfixi quales e Bithynia veniunt. hi fluctationibus alvi quas rheumatismos vocant medentur excrecentibusque in sede carnibus, minuunt enim eas et tempore absumunt, item lentiginem et mulierum in facie vitia. lavantur etiam ut plumbum in oculorum medicamenta. sordidis ulceribus et capitis eruptionibus, canum morsibus ex aqua inlinuntur.
- 99 libet et coquendi dare aliquas communes in omni eo genere observationes, quando ipsae suis manibus deliciae praeparant hunc cibum solum et cogitatione ante pascuntur sucinis novaculis aut argenteo

¹ noxios autem coni. *Mayhoff*.

² arborum cortici *Mayhoff*: arborum. piri *Dellefsen*: arborum fici aut ficis *codd.*

³ iis R: his fere omnes *codd.*

^a *Mayhoff's* conjecture, *noxios autem*, has much to be said for it, but does not materially alter the sense. Theophrastus and Dioscorides do not help us much in interpreting this part of Pliny, as they used *μύκητες* for both *boleti* and *fungi*, *βωλίτης* occurring only in Galen and *Geoponica*.

^b See XVI. § 31.

^c A species of oak, said to be the same as *δρῦς ἄγρία* (*φηγός*) perhaps *Quercus aegilops*.

the fig, fennel-giant, and the gum-exuding trees; inedible,^a as I have said,^b are those on the yew, the robur^c and the cypress. But who guarantees such things in the market? They all^d have a leaden colour. This will give an indication of poison, the closer it approximates to that of the bark of the tree. I have pointed out^e remedies for these poisonous fungi and shall do so again later on; in the meantime let me say that even this^f plant produces some remedies. Glaucias considers that mushrooms are good for the stomach. Hog fungi are hung up to dry, skewered on a rush as we see them come from Bithynia. These they use as a remedy for the fluxes of the belly that are called bowel catarrh, and for fleshy growths on the anus, which they reduce and in time cause to disappear; they do the like to freckles and spots on women's faces. They are also steeped in water, as lead is, to make an application for diseases of the eyes. They are applied to septic sores and to rashes on the head, and in water to dog bites. I should like also to give some pieces of advice about cooking all kinds of mushrooms, since they are the only kind of food that exquisites prepare with their own hands, feeding on them in anticipation, and handling

^a Probably Pliny means all the fungi, not all the dangerous ones, for he goes on to discriminate.

^b *E.g.*, in XX. §§ 25, 47, 86, 94, 132, 236, and XXI. 126, 184. Pears are mentioned at the end of this chapter (§ 99), and again in XXIII. § 115, as a remedy for poisoning by fungi, but they have not been mentioned before in this connection. So Pliny, unless speaking inaccurately, cannot have said, as Detlefsen would have him say: *piri adversus haec diximus remedia*. Otherwise *piri* is an attractive emendation.

^f The better attested reading is *his*; but this would refer to the same things as *haec* in the previous sentence, *i.e.*, poisonous fungi.

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apparatu comitante. noxii erunt fungi qui in coquendo duriores fient; innocentiores qui nitro addito coquentur, utique si percoquantur. tutiores fiunt cum carne cocti aut cum pediculo piri. prosunt et pira confestim sumpta. debellat eos et aceti natura contraria iis.

- 100 XLVIII. Imbribus proveniunt omnia haec, imbre et silphium venit primo, ut dictum est. ex Syria nunc hoc maxime importatur, deterius Parthico, sed Medico melius, extincto omni Cyrenaico, ut diximus. usus silphii in medicina foliorum ad purgandas vulvas pellendosque emortuos partus; decocuntur in vino albo et odorato, ut bibatur mensura acetabuli a balineis. radix prodest arteriis exasperatis, collectionibus sanguinis inlinitur. sed in cibis concoquitur aegre; inflationes facit et ructus, urinae quoque noxia, suggillatis cum vino et oleo amicissima et cum cera strumis. verrucae sedis crebriore eius suffitu cadunt.

- 101 XLIX. Laser e silphio profluens quo diximus modo inter eximia naturae dona numeratum plurimis compositionibus inseritur, per se autem algores excalfacit, potum nervorum vitia extenuat. feminis datur in vino, et lanis mollibus admovetur vulvae ad

^a Perhaps: "knives with amber handles," that is, with luxurious and expensive instruments. It seems more probable that the amber was supposed not to spoil the delicate flavour, or even to be a means of detecting less desirable specimens.

^b Nearly everything Pliny says about toadstools and poisonous fungi is false, and his advice would lead to fatal results if followed.

^c Silphium was probably *Ferula tingitana* and *Ferula marmarica* (which still exists in North Africa).

^d See XIX. § 41.

^e See XIX. § 39.

amber^a knives and equipment of silver. Those fungi will be poisonous which become harder in cooking; comparatively harmless will be those that are cooked with some soda added—at any rate if they are thoroughly cooked. They become safer when cooked with meat, or with pear stalks. Pears too are good to take immediately after them. The nature of vinegar too is opposed to them and neutralizes any poisonous action.^b

XLVIII. All these fungus growths spring up with *Silphium*. showers, and silphium^c too, as has been mentioned,^d first grew with a shower. At the present day it is imported chiefly from Syria, this Syrian silphium being not so good as the Parthian, though better than the Median; the silphium of Cyrene, as I have said,^e is now wholly extinct. The leaves of silphium are used in medicine to purge the uterus and to bring away the dead unborn baby; a decoction of them is made in white, aromatic wine, to be drunk after the bath in doses of one acetabulum. The root is good for soreness of the windpipe, and is applied to collections of extravasated blood; but it is hard to digest when taken as food, causing flatulence and belchings. It is injurious to the passing of urine, but with wine and oil most beneficial for bruises, and with wax for scrofulous swellings. Warts in the seat fall off if fumigated with it several times.

XLIX. Laser, which is distilled from silphium in *Laser*. the way I have said, being reckoned one of the most precious gifts of Nature, is used as an ingredient in very many medical prescriptions; but by itself it warms after chills, and taken in drink it alleviates affections of the sinews. In wine it is given to women, and on soft wool is used as a pessary to promote men-

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- menses ciendos. pedum clavos circumscariphatos ferro mixtum cerae extrahit. urinam ciēt ciceris
 102 magnitudine dilutum. Andreas spondet copiosius sumptum nec inflationes facere et concoctioni plurimum conferre senibus et feminis, item hieme quam aestate utilius, et tum aquam bibentibus. cavendum ne qua sit exulceratio intus. ab aegritudine recreationi efficax in cibo, tempestive enim datum cauterii vim optinet, adsuētis etiam utilius quam
 103 expertibus. extera corporum indubitatas confessiones habent. venena telorum et serpentium extinguit potum. ex aqua vulneribus his circumlinitur, scorpionum tantum plagis ex oleo, ulceribus vero non maturescentibus cum farina hordeacia vel fico sicca, carbunculis cum ruta vel cum melle vel per se visco superlitum ut haereat, sic et ad canis morsus, excrescentibus circa sedem cum tegmine ¹ punici mali ex aceto decoctum, clavis qui volgo morticini appel-
 104 lantur nitro mixto. alopecias nitro ante subactas replet cum vino et croco aut pipere ac murium fimo et aceto. perniones ex vino fovet et ex oleo coctum

¹ tegmine *Barbarus e Diosc.*: germine *codd. Deilefsen.*

^a Probably meaning dissolved, or at least dispersed, in some medium.

^b Or, "at that season (summer) it is useful, etc." Warmington suggests *tantum*, "only," for *tum*.

^c In the light of the context, it is more likely that this refers to absence of ulceration before taking the medicine than to precautions against it, but the Latin could bear the latter meaning as well as, or better than, the other.

^d Apparently, one that warms and dries.

struation. Mixed with wax it extracts corns from the feet after they have been cut round with the knife. A piece the size of a chick-pea, diluted,^a is diuretic. Andreas assures us that, though taken in copious doses, it causes no flatulence, and is a great aid to digestion for the aged and for women; also that it is more beneficial in winter than in summer, and even then more so ^b to teetotalers. Care, however, must be taken that there be no internal ulceration.^c Taken in the food it is a great help in convalescence; for given at the right time it possesses all the qualities of a caustic ^d medicine, being even more beneficial to those accustomed to it than to those unfamiliar with it. Its employment externally provides sure proofs of its healing power. Taken in drink it neutralizes the poisons of weapons and of serpents; it is applied in water around such wounds, only for the stings of scorpions is oil added. For sores not yet coming to a head it is applied with barley meal or dried fig, for carbuncles with rue, or with honey, or by itself, smeared over with some sticky substance to make it adhere, and, similarly prepared, for dog bites; a decoction in vinegar with the rind of the pomegranate for growths around the anus; for corns commonly known as mortified corns ^e some soda must be mixed with the laser. Mange should be first thoroughly treated with soda, and then the hair is restored by an application with wine, saffron or pepper, mouse dung, and vinegar. Chilblains are treated by fomentations of it with wine and by appli-

^a Forcellini says: "vel quia morticinam carnem referunt vel quia mortiferi sunt." *Morticinus* is an adjective applied to the flesh of animals that have died a natural death. So here, apparently, corns of dry, dead flesh. But Hardouin and Brotier both take the word to mean "fatal."

PLINY : NATURAL HISTORY

- inponitur; sic et callo, clavis pedum superrasis; praecipuae utilitatis contra aquas malas, pestilentes tractus vel dies; in tussi, uva, fellis veteri suffusione,¹ hydropisi,² raucitatibus; confestim enim purgat fauces vocemque reddit. podagras in spongea dilutum
- 105 posca lenit. pleuriticis in sorbitione vinum poturis datur, contractionibus, opisthotonicis ciceris magnitudine cera circumlitum. in angina gargarizatur. anhelatoribus et in tussi vetusta cum porro ex aceto datur, aequae ex aceto his qui coagulum lactis sorbuerint. praecordiorum vitiis syntecticis, comitialibus cum vino, in aqua mulsa linguae paralyti. coxendicium et lumborum doloribus cum decocto
- 106 melle inlinitur. non censuerim, quod auctores suadent, cavernis dentium in dolore inditum cera includi, magno experimento hominis qui se ea de causa praecipitavit ex alto. quippe tauros inflammant naribus inlitis, serpentes avidissimas vini admixtum rumpit. ideo nec inungui suaserim, cum Attico licet melle praecipiant. quas habeat utilitates admixtum aliis immensum est referre, et nos simplicia

¹ suffusione *codd.* : suffusioni *Mayhoff*.

² hydropisi *vet. con.* : *Mayhoff* appellat "*vocabulum omnino inusitatum.*" *Sed* cf. XX. § 43. *In codd. legitur* hydropicis.

^a Opisthotonus, the kind of tetanus more commonly mentioned by Pliny, *e.g.*, XX. §§ 31, 36, 154, 197, 228, 239; XXI. §§ 120; XXII. §§ 21, 75. See also p. xi.

^b This was supposed sometimes to be harmful. Cf. XXVIII. § 158 : *si coagulum alicui nocuerit, nam id quoque venenum est in prima lactis coagulatione.*

^c This shows that Pliny regarded such things as vinegar, honey, oil, wine, wax, barley meal, fig, all mentioned in this chapter as additions to the laser, as mere bases, without any effect upon the *natura* of the main ingredient.

cations of the decoction in oil. It is used in like manner for callosities, and for corns on the feet, which must first be pared down. It is of especial value against bad waters, unhealthy districts or unhealthy weather, and is used for cough, affections of the uvula, chronic biliousness, dropsy, and hoarseness; for immediately clearing the throat it restores the voice. Diluted with vinegar and water and applied with a sponge it soothes gouty limbs. It is given in gruel to patients with pleurisy who are going to drink wine, and in pills the size of a chick pea, coated with wax, to sufferers from cramp and tetanus.^a For quinsy it is used as a gargle; for wheezing and chronic cough it is given with leek in vinegar, and with vinegar to those who have swallowed curdled milk.^b With wine it is given for tubercular affections of the hypochondria and for epilepsy, in hydromel for paralysis of the tongue. Boiled down with honey it is used as liniment for sciatica and lumbago. I should not approve of the advice of the authorities, who say that an aching hollow tooth should be plugged with a stopping of laser and wax, because of the startling proof provided by the man who, as a result of this, threw himself down from a height. The truth is that it enrages bulls to have their muzzles rubbed with it, and mixed with wine it makes serpents burst, so very greedy are they for the wine. For this reason I should not advise the teeth to be cleaned with it, although it is recommended to do so with laser and Attic honey. The uses of laser mixed with other ingredients it would be an endless task to record, and I am dealing with remedies each of one substance,^c for in these their essential nature is manifest. In compounds, however, there is usually

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tractamus, quoniam in his naturam esse apparet, in illis coniecturam saepius fallacem, nulli satis custodita in mixturis concordia naturae ac repugnantia. qua de re mox plura.

- 107 L. Non esset mellis auctoritas in pretio minor quam laseris, ni ubique nasceretur. illud ipsa fabricata sit¹ natura, sed huic gignendo animal, ut diximus, innumeros ad usus, si quotiens misceatur aestimemus. prima propolis alvorum, de qua diximus, aculeos et omnia infixā corpori extrahit, tubera discutit, dura concoquit, dolores nervorum mulcet
- 108 ulceraque iam desperantia cicatricem cludit. mellis quidem ipsius natura talis est ut putrescere corpora non sinat, iucundo sapore atque non aspero, alia quam salis natura, faucibus, tonsillis, anginae omnibusque oris desideriis utilissimum, arescentique in febribus linguae, iam vero peripneumonicis, pleuriticis decoctum, item vulneribus, a serpente percussis et contra venena, fungos, paralyticis in mulso, quamquam suae mulso dotes constant. mel auribus instillatur cum rosaceo, lendes et foeda capitis animalia
- 109 necat. usus despumati semper aptior, stomachum tamen inflat, bilem auget, fastidium creat, et oculis per se inutile aliqui arbitrantur, rursus quidam angulos exulceratos melle tangi suadent. mellis causas atque differentias nationesque et indicationem

¹ sit *codd.* : est *coni.* *Mayhoff.*

^a See § 117 of this book.

^b See XI. § 11.

^c See XI. § 16.

^d Some take *in mulso* with *paralyticis* only. The parallel passage in Dioscorides II. 82 (Wellmann) does not help towards the correct decision.

risk of misleading guessing, for nobody is sufficiently careful, in making mixtures, to observe the sympathies and antipathies of the essential natures of the ingredients. I shall go more into detail later.^a

L. The value of honey in popular esteem would be no less than that of laser, were not honey produced everywhere. Granted that Nature herself created the one, she yet created an insect, as I have said,^b to make the other for countless uses, if we try to reckon the compounds of which it is an ingredient. First there is bee-glue in the hives, about which I have spoken;^c it extracts stings and all substances embedded in the flesh, reduces swellings, softens indurations, soothes pains of the sinews, and heals sores when it seems hopeless for them to mend. Honey itself has a nature that prevents a body from decaying, with a pleasant and not harsh taste, essentially different from salt, very good for the throat, tonsils, quinsy, all complaints of the mouth, and for tongues parched by fever; moreover, the decoction is excellent for pneumonia and pleurisy, while for wounds, snake bites, poisons, fungi and paralysis, it is prescribed in honey wine,^d although that has peculiar virtues of its own. Honey and rose oil are injected into the ears, and kill nits and offensive parasites on the head. Honey is improved by being skimmed, but it causes flatulence, biliousness and nausea; some think it of itself injurious to the eyes, though there are others on the other hand who recommend that ulcers in the corners be touched with honey. How honey is produced,^e the different kinds of it, the countries famous for it

* *Mellis causas* is a strange phrase, the exact meaning of which depends upon its context. "Why the bees make it," is another sense possible here, but less likely.

PLINY : NATURAL HISTORY

in apium ac deinde florum natura diximus, cum ratio operis dividi cogeret miscenda rursus naturam rerum pernoscere volentibus.

- 110 LI. In mellis operibus aqua mulsa debet tractari. duo genera eius: subitae ac recentis, alterum inveteratae. repentina despumato melle praeclaram utilitatem habet in cibo aegrotantium levi, hoc est alica eluta,¹ viribus recreandis, ore stomachoque mulcendo, ardores refrigerando. frigidam enim dari utilius ventrem molliendo. invenio apud auctores hoc potu² bibendum alsiosis, item animi humilis
111 et praeparci, quos illi dixere micropsychos. ut³ est ratio subtilitatis immensae a Platone descendens corpusculis rerum levibus scabris, angulosis rotundis magis aut minus ad aliorum naturam accedentibus ideo non eadem omnibus amara aut dulcia esse. sic et in lassitudine praeiores esse ad iracundiam et in siti. ergo et haec animi asperitas, seu potius animae, dulciore suco mitigatur lenito transitu spiritus et

¹ alica eluta *Urlichs, Mayhoff*: alicae elutae *codd., Detlefsen. Mayhoff.*

² hoc potu aut hoc potum *codd.*: decoctum *coll. Diosc. Mayhoff.*

³ ut est *Mayhoff*: et est cum aliquot *codd. Detlefsen.*

^a *Indicatio* seems to be the signs of value, quality and goodness.

^b See XI. § 32.

^c See XXI. § 74.

^d *Alica* was a variety of wheat carefully prepared and whitened with chalk. See XVIII. ch. 10 and 29. So *alica eluta* may mean "alica with the chalk washed out." So *Forcellini s.v. alica. Elutus* can mean also "diluted," "weak." Cf. Horace, *Satires* II. iv. 15. This gives as a possible meaning, "weak wheat-water," with all the coarse, solid part washed out. The diet of *aegrotantes* was of this sort. The latter is probably the meaning in § 128, where see note c.

and the signs of its value,^a I discussed when treating of the nature of bees^b and again when I came to flowers,^c since the plan of my work necessitated the division of things that have to be afterwards combined again by those who wish to learn thoroughly the works of Nature.

LI. In dealing with the benefits of honey I must include those of hydromel. There are two kinds of it: one is made for the occasion and used fresh, and the other is the matured. Occasional hydromel, made from skimmed honey, is extremely useful as an ingredient of the light diet of invalids (that is strained wheat^d) for restoring the strength, for soothing the mouth and stomach, and for cooling feverish heat. For it is cold hydromel that is better to be given for loosening the bowels. My authorities state that it should be given to drink to persons subject to chill, and also to those of a poor, weak spirit, whom the same authorities called *μικρόψυχοι*,^e in harmony with the very ingenious theory^f that had its origin in Plato. This says that the atoms of things, being smooth or rough, angular or round, are accordingly more or less adapted to the nature of different individuals, and that therefore the same things are not bitter or sweet to everybody; and so, when we are tired or thirsty we are more prone to anger. Therefore also this roughness of the mind, or rather I should say of the soul, is made smoother by a sweeter flavour, which soothes the wind-pipe and makes

^a Dioscorides V. 9 (Wellmann) says of *μελίκρατον*, just before coming to hydromel: *τῷ δὲ ἀφψημένῳ ἐπὶ τῶν μικροσφύκτων καὶ ἀσθενῶν*. So since Salmasius many scholars have believed that Pliny thought he heard *μικρόψυχοι* (weak-souled) for *μικρόσφυκτοι* (with a weak pulse).

^f See Seneca *de ira* III. 9, 4.

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molliore facto meatu, ne scindat euntem redeuntemque. experimenta in se cuique; nullius non ira, luctus, tristitia et omnis animi impetus cibo mollitur, ideoque observanda sunt quae non solum corporum medicinam sed et morum habent.

- 112 LII. Aqua mulsa et tussientibus utilis traditur, calefacta invitat vomitiones, contra venenum psimithii salutaris addito oleo, item contra hyoscyami cum lacte maxime asinino, et contra halicacabi, ut diximus. infunditur et auribus et genitalium fistulis. vulvis inponitur cum pane molli, subitis tumoribus, luxatis leniendisque omnibus. inveteratae usum damnavere posterius minus innocentem aqua minusque vino firmum. longa tamen vetustate transit in vinum, ut constat inter omnes, stomacho inutilissimum nervisque contrarium.
- 113 LIII. Semper mulsum ex vetere vino utilissimum. facillimeque cum melle concorporatur, quod in dulci numquam evenit. ex austero factum non inflat stomachum, neque ex decocto melle, minusque implet, quod fere evenit. adpetendi quoque revocat aviditatem cibi. alvum mollit frigido potu, pluribus
- 114 calido sistit, corpora auget. multi senectam longam mulsi tantum intrita tolerare, neque alio ullo cibo,

^a XXI. § 182.

^b *Nervus* at this period included nerve, ligament and tendon. See Celsus II. 8, 40 (W. G. Spencer).

^c Fée thinks that *must* is referred to.

more gentle the passage of the breath, so that neither inhalation nor exhalation is violently broken. Each of us may make trial for himself. There is no one who does not find that by food can be softened his anger, grief, sadness, and every violent emotion of the mind. Accordingly I must take notice not only of things which give healing to our bodies, but also of those which heal our character.

LII. Hydromel is also said to be useful for coughs, but when warmed it provokes vomiting. With oil it is beneficial in cases of white-lead poisoning, also with milk, especially asses' milk, for henbane, and, as I have said,^a for poisoning by *halicacabum*. It is poured into the ears, and into fistulas of the genitals. It is applied with soft bread to the uterus, to sudden swellings, to sprains and to all complaints needing soothing treatment. The use of matured hydromel has been condemned by recent authorities as being less harmless than water and keeping less well than wine. When however it has been kept for a long time, it turns into a wine which, as all are agreed, is most injurious to the stomach and bad for the sinews.^b

LIII. The best honey wine is always made with old wine, it and honey combining very easily, which never happens when the wine is sweet.^c Made out of dry wine it causes no flatulence in the stomach, nor does it do so when the honey is boiled, and the usual inconvenience with honey wine, a sense of fullness, is not experienced. It also revives a failing appetite. Drunk cold it relaxes the bowels; taken warm it binds them in most cases, and puts on flesh. Many have lived to a very great age on no other food but a mash made with honey wine, as in the

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celebri Pollionis Romili exemplo. centensimum annum excedentem eum divus Augustus hospes interrogavit, quam maxime ratione vigorem illum animi corporisque custodisset. at ille respondit: intus mulso, foris oleo. Varro regium cognominatum arquatorum morbum tradit, quoniam mulso curetur.

- 115 LIV. Melitites quo fieret modo ex musto et melle docuimus in ratione vini. saeculis iam fieri non arbitror hoc genus inflationibus obnoxium. solebat tamen inveteratum alvi causa dari in febre, item articulario morbo et nervorum infirmitate laborantibus et mulieribus vini abstemiis.

- 116 LV. Mellis naturae adnexa cera est, de cuius origine, bonitate, nationibus suis locis diximus. omnis autem mollit, calfacit, explet corpora, recens melior. datur in sorbitione dysintericis, favique ipsi in pulte alicae prius tostae. adversatur lactis naturae, ac milii magnitudine decem grana cerae hausta non patiuntur coagulari lact in stomacho. si inguen tumeat, albam ceram in pube fixisse remedio est.

^a Or (possibly) "guest."

^b Jaundice was so called from the discoloration of the eyes and of the skin caused by the disease.

^c Cf. Celsus III. 24 (end), who suggests that the name *regius morbus* was given because of the sumptuous nature of the treatment usually adopted.

^d See XIV. § 85.

^e Dioscorides V. 7 says: *δίδεται μὲν ἐν χρονίοις πυρετοῖς τοῖς ἀσθενῇ <τὸν> στόμαχον ἔχουσιν . . . χρήσιμος δὲ καὶ γυναιξὶν ὑδροποτούσαις*. There is no variation in the MSS, and it would be wrong to emend *inveteratum* (sc. *genus*) to *inveterata*, for the order of words is against its agreeing with *febre*.

well-known case of Pollio Romilius. He was more than a century old when Augustus, now in Heaven, who was his host,^a asked him what was the chief means whereby he had kept such vigour of mind and body. His reply was: "By honey wine within and by oil without." Varro relates that the rainbow^b disease (jaundice) has been styled the royal disease because it is treated with the royal^c drink of honey wine.

LIV. How *melitites* used to be made out of must *Melitites*. and honey I have set out in my account of wine.^d I believe that this kind of honey has not been made now for generations, so liable was it to cause flatulence. When well matured,^e however, it used to be given in fever because of its action on the bowels, and also to sufferers from gout and from feebleness of the sinews, and to women who are teetotalers.

LV. Honey is by nature closely related to wax, *Wax*. the source of which, its virtues, and the districts that produce it, I have discussed in the proper places.^f All wax however is emollient, warming, and restorative of flesh;^g the fresher it is the better. It is given to sufferers from dysentery in their gruel, and the whole comb in a porridge of groats that has been previously roasted. Wax and milk are of opposite natures, and ten pills of wax, of the size of a grain of millet will, if swallowed, prevent milk curdling in the stomach. Should the groin swell, the application of white wax to the pubes is a remedy.

^f See XI. § 18 and XXI. § 83.

^g Dioscorides (II. 83) has *πληρωτικὴν τε* (sc. *δύναμιν ἔχει πᾶς κηρὸς*) *μερίως*. Brotier is probably right in explaining thus: *ulcera corporum carne replet.*

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- 117 LVI. Nec huius usus quos mixta aliis praestat enumerare possit medicina, sicuti nec ceterorum quae cum aliis prosunt. ista, ut diximus, ingeniis constant. non fecit ceratum, malagmata, emplastra, collyria, antidota parens illa ac divina rerum artifex; officinarum haec, immo verius avaritiae commenta sunt. naturae quidem opera absoluta atque perfecta gignuntur, paucis ex causa, non ex coniectura rebus adsumptis, ut suco aliquo sicca temperentur ad meatus, aut corpore alio umentia ad nexus.
- 118 scripulatim quidem colligere ac miscere vires non coniecturae humanae opus, sed inpudentiae est. nos nec Indicarum Arabicarumque mercium aut externi orbis adtingimus medicinas. non placent remediis tam longe nascentia, non nobis gignuntur, immo ne illis quidem, alioqui non venderent. odorum causa unguentorumque et deliciarum, si placet, etiam superstitionis gratia emantur, quoniam ture supplicamus et costo. salutem quidem sine istis posse constare vel ob id probabimus ut tanto magis sui delicias pudeat.
- 119 LVII. Sed medicinas e floribus coronamentisque et hortensiis quaeque mandantur herbae persecuti quonam modo frugum omittimus? nimirum et has

^a It is not clear whether Pliny supposes that these "natural" combinations are made by man or by Nature herself.

^b *Remediis* seems to be dative with *placent*: "are satisfactory to (for) remedies."

^c Many MSS. have *manduntur*, and I translate *mandantur* as a generic subjunctive from that verb. Warmington, however,

LVI. The uses that wax can be put to in combination with other substances would more than fill a pharmacopoeia, and the same is true of other materials that combine usefully with others. These, as I have said, are due to man's ingenuity. Wax salves, poultices, plasters, eye-salves, antidotes, were not made by the divine Mother who created the Universe: they are the inventions of the laboratory, or more correctly of human greed. Nature indeed brings forth her works absolutely perfect; a few ingredients are chosen ^a with a purpose, not by guess-work, so that dry substances may be modified by some fluid to facilitate their passage, or moist things by a more substantial body to give the required consistency. But for a man to weigh out, scruple by scruple, the active ingredients that he gathers together and blends, is not human guess-work but human impudence. I myself shall not touch upon drugs imported from India and Arabia or from the outer world. Ingredients that grow so far away are unsatisfactory for remedies; ^b they are not produced for us, nay, not even for the natives, who in that case would not sell them. Let them be bought if you like to make perfumes, unguents and luxuries, or even in the name of religion, for we worship the gods with frankincense and costmary. But health I shall prove to be independent of such drugs, if only to make luxury all the more ashamed of itself.

LVII. But having discussed medicines from flowers, garland and garden, as well as herbs which are chewed,^c how can I possibly omit medicines from cereals? Indeed it would be fitting to mention these

suggests that *mandantur* may be indicative from *mandare* and may mean: "plants which are entrusted to the herb-garden."

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indicare conveniat. in primis sapientissima animalium esse constat quae fruge vescantur. siliginis grana combusta et trita in vino Amineo¹ oculis inlita epiphoras sedant, tritici vero ferro combusta iis quae
120 frigus usserit praesentaneo sunt remedio. farina tritici ex aceto cocta nervorum contractionibus, cum rosaceo vero et fico sicca myxisque decoctis furfures tonsillis faucibusque gargarizatione prosunt. Sex. Pomponius praetorii viri pater, Hispaniae citerioris princeps, cum horreis suis ventilandis praesideret, correptus dolore podagrae mersit in triticum super genua sese, levatusque siccatis pedibus mirabilem in
121 modum hoc postea remedio usus est. vis tanta est ut cados plenos siccet. paleam quoque tritici vel hordei calidam inponi ramicum incommodis experti iubent, quaque decoctae sint aqua fovere. est in farre vermiculus teredini similis, quo cavis dentium² cera incluso cadere vitati dicuntur, etiam si fricentur. olyram arincam diximus vocari. hac decocta fit medicamentum quod Aegypti atheram vocant, infantibus utilissimum, sed et adultos inlinunt eo.

¹ *Post Amineo comma delevi.*

² *Post dentium addere velim cum.*

^a Perhaps an honorific title.

^b That is, if they are buried in the grain.

as well. In the first place it is a well known fact that those animals that feed on grain are the most intelligent. Grains of common wheat well roasted and then crushed, applied in Aminean wine to the eyes soothe fluxes; moreover, well roasted on an iron plate grains of naked wheat are a quick remedy for frost-bite. The flour of naked wheat boiled in vinegar is good for cramp; the bran moreover and rose oil, dried figs and sebesten plums, all boiled down, make a good gargle for tonsils and throat. Sextus Pomponius, father of a man who was praetor, himself the most distinguished man ^a in Nearer Spain, was superintending the winnowing in his barns when he was seized with the pains of gout. Burying himself above his knees into the wheat he was relieved of the pain, and the water in his feet dried up in a wonderful way, so that afterwards he adopted this procedure as a remedy. The absorbent power of wheat is so great that it dries up casks full of liquid.^b Experienced authorities also prescribe the chaff of wheat or barley to be applied warm for hernia,^c and the water in which it has been boiled to be used for fomentations. There is to be found in emmer-wheat a little worm like the wood-worm. If this be plugged with wax into the hollow of a decayed tooth, it is said that the tooth comes out, or even if the affected part be rubbed with it. Olyra (two-grained wheat) is, as I have said,^d also called arinca. With a decoction of it a medicine is made which the Egyptians call athera, very beneficial for babies, though adults too use it as a liniment.

^a Pliny often uses *incommoda* for ailments; e.g., *incommoda corporum, pulmonum, vesicae*.

^d See XVIII. § 92.

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- 122 LVIII. Farina ex hordeo et cruda et decocta collectiones impetusque discutit, lenit, concoquit. decoquitur alias in mulsa aqua aut fico sicca, at¹ iocineris doloribus, cum pus concoqui opus est, in vino; cum inter coquendum discutiendumque cura est, tunc in aceto melius aut in faece aceti aut in cotoneis pirisve decoctis; ad multipedae morsus cum melle, ad serpentium in aceto et contra suppurantia, ad extrahendas suppurationes ex posca addita resina
- 123 Gallica; ad concoctiones vero et ulcera vetera cum resina, ad duritias cum fimo columbarum aut fico sicca aut cinere, ad nervorum inflammationes aut intestinorum vel laterum dolores cum papavere aut meliloto, et quotiens ab ossibus caro recedit, ad strumas cum pice et inpubis pueri urina cum oleo. cum Graeco feno contra praecordiorum tumores vel
- 124 in febribus cum melle vel adipe vetusto. suppuratis triticea farina multo lenior. nervis cum hyoscyami suco inlinitur, ex aceto et melle lentigini. zaeae, ex qua alicam fieri diximus, efficacior etiam hordeacea videtur, trimenstris mollior, ex vino rubro ad scorpionum ictus tepida et sanguinem excreantibus, item

¹ sicca, at *Detlefsen*: siccatur VG: ceteri codd. aut sicca ut aut sicca.

^a *Impetus*, an "attack" of fever, etc., is used by Pliny with genitives like *vulnerum*, *oculorum*, and even by itself. It often means "inflamed swelling," or even "inflammation." XX. § 16, *oculorum impetus* = *Dioscorides* II. 134, *ὀφθαλμοῦ φλεγμονός*; *tumores et impetus impositum (thymum) tollit*; XXII. § 122 *collectiones impetusque discutit*. Clearest of all perhaps is § 126 of XXII, *impetusque rubicundi tumoris*. In XXII. § 111 and XXXV. § 106, *animi impetus* means "violent emotions."

^b The dictionaries recognize *concoquere* in the sense of "to mature an abscess," but not the noun *concoctio*. See too the note on § 91.

LVIII. Barley meal, both raw and boiled, dis- *Barley meal.*
 perses abscesses and inflamed gatherings; ^a it softens
 them and brings them to a head. At other times a
 decoction of it is made in hydromel or with dried
 figs, but for pains in the liver, when pus needs
 to be matured, it should be decocted in wine; when
 there is difficulty in deciding whether maturing or
 dispersal is necessary, then it is better for the
 decoction to be in vinegar, in lees of vinegar, or in
 boiled down quinces or pears. It is used with honey
 for multipede stings, in vinegar for snake bites and
 to stop suppuration, but for bringing away suppurat-
 ing matter with diluted vinegar to which Gallic
 resin has been added. For maturing of abscesses, ^b
 however, and for chronic sores it must be used with
 resin, for indurations with pigeons' dung or dried
 fig or ashes, for inflammations of the sinews or of the
 intestines or pains in the sides with poppies or melilot,
 and also when the flesh falls away from the bones, for
 scrofulous swellings with pitch and the urine of a boy
 below the age of puberty added to oil. With
 fenugreek it is prescribed for swellings of the hypo-
 chondria, and for fevers with honey or stale fat.
 For suppurations wheat flour is much more soothing. ^c
 To sinews it is applied with juice of henbane, for
 freckles, in vinegar and honey. Meal of emmer-wheat,
 out of which as I have said *alica* is made, seems to
 be more efficacious even than barley meal, the three-
 month ^d variety being the more soothing. It is
 used warm, in red wine, for the stings of scorpions,
 spitting of blood, and for tracheal affections. For a

^a The grammar would also allow (*farina* ablative): "For
 suppurations it is much more soothing than wheat meal."

^d *I.e.*, that ripens in three months.

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- 125 arteriae, tussi cum caprino sebo aut butyro. ex feno Graeco mollissima omnium ulcera manantia sanat et furfures corporis, stomachi dolores, pedes et mammas cum vino et nitro cocta. aerina magis ceteris purgat ulcera vetera et gangraenas, cum raphano et sale et aceto lichenas, lepras cum sulphure vivo, et capitis dolores cum adipe anserino inposita fronti. strumas et panos concoquit cum fimo columbino et lini semine decocta in vino.
- 126 LIX. De polentae generibus in frugum loco satis diximus. medicorum ratione a farina hordei distat eo quod torretur, ob id stomacho utilis. alvum sistit impetusque rubicundi tumoris, et oculis inlinitur et capitis dolori cum menta aut alia refrigerante herba, item pernionibus et serpentium plagis, item ambustis ex vino, inhibetque pusulas.
- 127 LX. Farina in pollinem subacta vim extrahendi umoris habet adeo ut cruore suffusis in fascias usque sanguinem perducatur, efficacius in sapa. inponitur et pedum callo clavisque. nam cum oleo vetere ac pice decocto polline condylomata et alia omnia sedis vitia quam maxime calido mirabilem in modum curantur. pulvere corpus augetur. farina qua chartae glutinantur sanguinem excreantibus datur tepida sorbenda efficaciter.
- 128 LXI. Alica res Romana est et non pridem excogi-

^a For *butyron* see XI. § 239 and XXVIII. § 133.

^b For *furfur* (scurf, dandruff, seborrhoea, etc.) see Spencer on Celsus VI. 2.

^c See XVIII. § 72.

^d For *condyloma* (a knuckle-shaped swelling in the anus) see Celsus V. 28, 23 with Spencer's note, and note on XXI. § 142 (p. 264).

cough, goat-suet or butter^a is added. Fenugreek meal, the most soothing of all, boiled with wine and soda, cures running sores and scurf^b on the body, stomach ache, and affections of the feet and of the breasts. Darnel meal clears up chronic ulcers and gangrenes more than do the other kinds; for lichens radishes, salt and vinegar must be added, for leprous sores native sulphur, and for headache it should be applied with goose-grease to the forehead. Boiled in wine, with pigeons' dung and linseed, it matures scrofulous swellings and superficial abscesses.

LIX. About the various kinds of pearl barley I *Pearl
barley.* have said^c enough in the discussion of cereals. Physicians are of opinion that its difference from barley meal is due to its being roasted, which makes it wholesome for the stomach. It checks looseness of the bowels and inflamed swellings. Combined with mint or other cooling herb it is applied to sore eyes and aching heads, as well as to chilblains and to snake wounds, while for burns it is applied in wine, and it also checks pustules.

LX. Flour reduced to fine powder has the power of drawing out moisture to such an extent that it extracts blood from bloodshot areas, even to soaking the bandages; if boiled must be added the application is still more efficacious. It is put on callosities and corns on the feet. But when boiled with old oil and pitch, and applied as hot as possible, fine flour is wonderful treatment for condyloma^d and all other affections of the anus. Made into pottage it puts on flesh. The flour with which papyrus sheets are stuck together is effectively given in lukewarm drink to those who suffer from spitting of blood.

LXI. Alica is peculiarly Roman, and a discovery *Groats.*

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tata, alioqui non tisanæ potius laudes scripsissent Graeci. nondum arbitror Pompei Magni aetate in usu fuisse, et ideo vix quicquam de ea scriptum ab Asclepiadis schola. esse quidem eximie utilem nemo dubitat, sive eluta detur ex aqua mulsa sive
 129 in sorbitiones decocta sive in pulvem. eadem in alvo sistenda torretur, dein favorum cera coquitur, ut supra diximus. peculiariter tamen longo morbo ad tabitudinem redactis subvenit ternis eius cyathis in sextarium aquae sensim decoctis, donec omnis aqua consumatur, postea sextario lactis ovilli aut caprini addito per continuos dies,¹ mox adiecto melle. tali genere sorbitionis emendatur syntexis.
 130 LXII. Milio sistitur alvus, discutuntur tormina, in quem usum torretur ante. nervorum doloribus et aliis fervens in sacco inponitur, neque aliud utilius, quoniam levissimum mollissimumque est et caloris capacissimum. itaque talis usus eius est ad omnia quibus calor profuturus est. farina eius cum pice liquida serpentium et multipedæ plagis inponitur.

¹ *Post dies lacunam indicat Mayhoff, Sillig secutus. Fortasse excidit III.*

^a Galen (without mentioning Pliny) says rightly that *alica* was known in the days of Hippocrates, being called *χόνδρος* (XII. 14).

^b 106-48 B.C.

^c In this passage at least, as the two thicker forms follow immediately, *alica eluta* seems to be the liquid by itself, with all the solid part "washed out" (*eluta*). See p. 372, note on § 110.

^d See § 116 *datur . . . tostae*. It seems better to take *cera*

of recent date, or the Greeks would not have sung the praises of barley water in preference.^a It was in my opinion not yet used in the age of Pompey^b the Great, and for that reason scarcely anything about it has been written by the school of Asclepiades. Its extreme usefulness nobody doubts, whether it is given in hydromel after straining^c or boiled down to gruel or to thick pottage. For arresting looseness of the bowels alica is roasted, and then honeycomb wax is cooked with it, as I have said above.^d It is however specially useful for those who by long illness have been reduced to a consumptive condition; the dose is three cyathi put into a sextarius of water and gradually boiled down until all the water has evaporated, when a sextarius of sheep's or goats' milk is added, and the mixture taken daily;^e after a while honey also is added. By a course of this gruel decline is arrested.

LXII. Common millet checks looseness of the bowels and removes gripings, for which purposes it is first roasted. For pains of the sinews, and for other pains it is applied hot in a bag.^f No other application is more useful, for it is very light, very soothing and very retentive of heat. Accordingly it is much used in all cases where the application of heat is likely to prove beneficial. Millet meal and liquid pitch are applied to the wounds inflicted by snakes and multipedes.

as the subject of *coquitur*. It is the custom of Pliny to add *cum*, *in* or *ex* to the ablative to mean "boil in."

^a If a numeral (e.g. III) has fallen out: "for (three) days running."

^f Dioscorides II. 97 (Wellmann): *ψαλθεῖσα δὲ καὶ βληθεῖσα εἰς σάκκους πυριωμένη στρόφων καὶ τῶν ἄλλων ἀλγημάτων ἐστὶ βοήθημα.*

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- 131 LXIII. Panicum Diocles medicus mel frugum appellavit. effectus habet quos milium. in vino potum prodest dysintericis. similiter his quae vaporanda sunt excalfactum inponitur. sistit alvum in lacte caprino decoctum et bis die haustum. sic prodest et ad tormina.
- 132 LXIV. Sesima trita in vino sumpta inhibet vomitiones. aurium inflammationi inlinitur et ambustis. eadem efficit et dum in herba est. hoc amplius oculis inponitur decocta in vino. stomacho inutilis in cibis et animae gravitatem facit. stellionum morsibus resistit, item ulceribus quae cacoethe vocant, et auribus oleum quod ex ea fit prodesse
- 133 diximus. sesamoides a similitudine nomen accepit, grano amaro, folio minore. nascitur in glareosis. detrahit bilem in aqua potum.¹ semen inlinitur igni sacro, discutit panos.

Est etiamnum aliud sesamoides Anticyrae nascens, quod ideo aliqui Anticyricon vocant, cetera simile erigeronti herbae, de qua dicemus suo loco, grano sesamae. datur in vino dulci ad detractones quan-

¹ potum. semen *Detlefsen*: potum semen, *Mayhoff*.

^a Perhaps because a Greek name for it was *μελίνη* or *μέλινος*. Dioscorides II. 98.

^b Dioscorides II. 99: ἡ δὲ πόα καθεψηθεῖσα ἐν οἴνῳ τὰ αὐτὰ ποιεῖ, μάλιστα δὲ φλεγμοναῖς ὀφθαλμῶν καὶ περιωδυνῶν ἀρμόζει.

^c Dioscorides II. 99: σήσαμον κακοστόμαχον καὶ δυσωδίας στόματος ποιητικόν.

^d Superficial malignant disease. See Spencer on Celsus, Vol. III. Appendix I.

^e See XXIII. § 95.

^f Probably the *σησαμοειδὲς τὸ μικρόν* of Dioscorides IV. 163, which is said to grow ἐν τραχέσι χωρίοις.

^g This is the *σησαμοειδὲς μέγα* of Dioscorides IV. 149. He says that it is like groundsel or rue, and that a three-finger

LXIII. Italian millet was called by the physician Diocles the honey ^a of cereals. It produces the same ^{Italian millet.} results as common millet. Taken in wine it is good for dysentery. In like form it is applied hot where warm fomentations are called for. Looseness of the bowels is checked if a decoction in goats' milk is taken twice a day. In this form it is also good for gripings.

LXIV. Sesame ground and taken in wine checks ^{Gingelly.} vomiting. It is applied to inflammation of the ears and to burns. It has the same effect ^b even while it is in the blade. For this reason it is more copiously applied, decocted in wine, to the eyes. As a food it is injurious to the stomach and causes the breath to smell offensive.^c It neutralizes the bites of the gecko, and is beneficial to the sores known as malignant;^d the oil made from it, as I have said,^e is good for the ears. Sesamoides^f has received its name from its likeness to sesame; it has a smaller leaf, and the grain is bitter. It grows on gravelly soils. Taken in water, it carries away bile. The seed is used as an application for erysipelas, and it disperses superficial abscesses.

There is also another sesamoides,^g which grows at Anticyra, and is therefore called by some Anticyricon. It has the seed of sesame, but in other respects is like the plant erigeron, about which I shall speak in the proper place.^h A three-finger pinch is given in sweet wine as a purge. There they mix with pinch purges upwards if taken with three half-oboli of white hellebore added to honey and water. He says nothing about sweet wine, but does say that *σησαμοειδές* is bitter. There is no reference to melancholia. This is a passage that throws some light on the relation between Dioscorides and Pliny.

^a See XXV. § 167.

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- tum tribus digitis capitur. miscent ibi et ellebori albi unum et dimidium obolum, purgationem eam adhibentes maxime insaniae melancholicae, comitialibus, podagris. et per se drachmae pondere exinanit.
- 134 LXV. Hordeum optimum quod candidissimum. sucus decocti in aqua caelesti digeritur in pastillos, ut infundantur exulceratis interaneis et vulvis. cinis eius ambustis inlinitur et carnibus quae recedunt ab ossibus et eruptionibus pituitae, muris aranei morsibus. idem adperso sale ac melle candorem dentibus, suavitatem oris facit. eos qui pane hordeacio utuntur morbo pedum temptari negant. novem granis furunculum si quis circumducat, singulis ter manu sinistra, et omnia in ignem abiciat, confestim sanari aiunt. est et herba phoenicea appellata a Graecis, a nostris vero hordeum murinum. haec trita e vino pota praeclare ciet menses.
- 136 LXVI. Tisanae quae ex hordeo fit laudes uno volumine condidit Hippocrates, quae nunc omnes in alicam transeunt. quanto innocentior alica! Hippocrates tamen sorbitionis gratia laudavit, quoniam lubrica ex facili hauriretur, quoniam sitim arceret, quoniam in alvo non intumesceret, quoniam facile redderetur et adsuētis hic cibus solus in febris die posset dari, tantum remotus ab istis qui medicinam fame exercent. sorbitionem tamen dari totam vetuit aliudve quam sucum tisanae, item vetuit,

^a *Regimen in Acute Diseases*, especially ch. X.

it also one and a half oboli of white hellebore, administering it principally as a purgative for melancholic madness, epilepsy and gouty pains. Taken by itself too in doses of one drachma it empties the bowels.

LXV. The best barley is the whitest. The juice *Barley.* from a rainwater decoction is worked up into lozenges to be used as suppositories for ulcerations of the intestines and of the uterus. Barley ash is applied to burns, to flesh that comes away from the bones, for eruptions of phlegm and for bites of the shrew-mouse. The same added to honey and a sprinkling of salt makes the teeth white and the breath smell sweet. It is said that those who use barley bread never suffer from gout in the feet. They also say that, if a man, taking nine grains of barley, trace three times with each of them a circle round a boil, using the left hand, and then throw all the grains into the fire, the boil heals at once. There is also a plant, called phoenicea by the Greeks and mouse barley by our countrymen. This pounded and taken in wine is an excellent emmenagogue.

LXVI. To ptisan, which is prepared from barley, *Ptisan.* Hippocrates devoted a whole volume,^a lavishing on it praises which today are all given instead to alica, a far more wholesome preparation. Hippocrates however praises ptisan for its merits as a broth, because (as he says) being lubricant it is easily swallowed, quenches thirst, does not swell in the belly, is easily evacuated, and is the only food that can be given twice a day to those fever patients who are in the habit of taking two meals, so different is Hippocrates from those who treat their patients with a starvation diet. However he forbids the broth to be swallowed whole, or any part of it other

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- quamdiu pedes frigidi essent, tunc quidem nec positionem dandam. fit et ex tritico glutinosior arteriaeque exulceratae utilior.
- 137 LXVII. Amylon hebetat oculos, et gulae inutile contra quam creditur. item alvum sistit, epiphoras oculorum inhibet et ulcera sanat, item pusulas et fluctiones sanguinis. genas duras emollit. datur cum ovo his qui sanguinem reiecerint, in vesicae vero dolore semuncia amyli cum ovo et passi tribus ovis subfervefacta a balineo. quin et avenacea farina decocta in aceto naevos tollit.
- 138 LXVIII. Panis hic ipse quo vivitur innumeras paene continet medicinas. ex aqua et oleo aut rosaceo mollit collectiones, ex aqua mulsa duritias valde mitigat. datur ex vino ad discutienda aut quae praestringi opus sit et, si magis etiamnum, ex aceto, adversus acutas pituitae fluctiones, quas Graeci rheumatismos vocant, item ad percussa, luxata. ad omnia autem fermentatus, qui vocatur autopyrus, utilior. inlinitur et paronychiis et callo pedum in aceto. vetus aut nauticus panis tusus
- 139 atque iterum coctus sistit alvum. vocis studiosis et contra destillationes siccum esse primo cibo utilissimum est. sitanius, hoc est ex trimestri, incussa in facie aut desquamata cum melle aptissime curat. candidus aegris aqua calida frigidave made-

^a Or, "cheeks."

^b Bread made with whole-meal, none of the bran being taken away.

^c There is a doubt about *sitanius* (Greek σιτάνιος). Used of flour in Hippocrates, it seems to mean "sifted"; applied to grain, perhaps "this year's."

than the juice; he says also that it must never be given so long as the feet are cold; indeed that then no drink of any kind should be given. Ptisan can also be made from wheat, when it is more viscous and more beneficial to an ulcerated trachea.

LXVII. Starch dulls the eyes, and is injurious to the throat, though that is not the general belief. It also checks loose bowels, arrests fluxes from the eyes, healing ulcerations of them as well as pustules and flows of blood. It softens^a hard eyelids. With egg it is given to those who have spit blood; in pain of the bladder moreover half an ounce of starch with egg and three egg-shells of raisin wine are given lukewarm after the bath. Moreover, oatmeal boiled in vinegar removes moles.

LXVIII. The very bread which forms our staple diet has almost innumerable medicinal properties. Applied in water and oil or in rose oil it softens abscesses; in hydromel it is very soothing to indurations. In wine it is given to disperse or to compress as need may be, and, if greater strength be called for, in vinegar for those violent fluxes of phlegm which the Greeks call rheumatismi, as well as for bruises and sprains. For all purposes, however, leavened bread, of the kind called autopyrus,^b is the more beneficial. In vinegar it is also applied to whitlows and to callosities on the feet. Stale bread or sailors' bread, pounded and then baked again, checks looseness of the bowels. For those anxious to improve the voice and for catarrhs it is very beneficial to eat dry bread at breakfast. Sitanius,^c that is bread made of three-month wheat, applied with honey is a very good cure for bruises on the face or scaly eruptions. White bread soaked in warm or cold

Starch.

*Medicinal
uses of
bread.*

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factus levissimum cibum praebet. oculorum tumori ex vino inponitur, sic et pusulis capitis aut adiecta arida myrto. tremulis panem ex aqua esse ieiunis statim a balineis demonstrant. quin et gravitatem odorum in cubiculis ustus emendat et vini in saccos additus.

- 140 LXIX. Et faba auxiliatur. namque solida fricta fervensque in acre acetum coniecta torminibus medetur. in cribro¹ fresa et cum alio cocta contra deploratas tusses suppurationesque pectorum cotidiano cibo sumitur, et commanducata ieiuno ore et ad furunculos maturandos discutiendosve inponitur, et
- 141 in vino decocta ad testium tumores, ad genitalia. lomento quoque ex aceto decocto tumores maturat atque aperit, item livoribus, combustis medetur. voci eam prodesse auctor est M. Varro. fabalium etiam siliquarumque cinis ad coxendices,² ad nervorum veteres dolores cum adipis suilli vetustate prodest. et per se cortices³ decocti ad tertias sistunt alvum.

- 142 LXX. Lens optima quae facillime coquitur et ea quae maxime aquam absorbet. aciem quidem oculorum obtundit et stomachum inflat, sed alvum sistit in cibo magisque caelesti aqua discocta, eadem solvit minus percocta. pusulas ulcerum rumpit, ea quae intra os sunt purgat et adstringit. collectiones omnes inposita sedat maximeque exulceratas et

¹ cribro *Warmington*: cibo *codd.*

² coxendices *cum* Vd *Mayhoff*: coxendicis *cum* RE *Dellefsen.*

³ cortices *cum* Vd *Mayhoff*: corticis *cum* RE *Dellefsen.*

water affords a very light food for invalids. In wine it is applied to swollen eyes, and in this form or with the addition of dried myrtle to pustules on the head. Persons with palsy are recommended to eat bread soaked in water, fasting, and immediately after the bath. Moreover, bread burnt in bedrooms removes the close smell, and put in the strainers any unpleasant odour in wine.

LXIX. The bean too supplies helpful remedies. *Of beans.* For roasted whole and thrown hot into strong vinegar it heals colic. Crushed in a sieve and boiled with garlic it is taken with the daily food for incurable coughs and suppurations of the chest; chewed in the mouth of one fasting it is also applied to ripen or disperse boils, and boiled down in wine for swellings of the testicles and for troubles of the genitals. In the form of meal too, boiled down in vinegar it ripens tumours and breaks them, besides healing contusions and burns. That it is good for the voice we are assured by M. Varro. The ashes too of beanstalks and of the pods are good for sciatica, and with old pigs' lard for chronic pains of the sinews. The husks by themselves boiled down to one third check looseness of the bowels.

LXX. Those lentils are best which are most easily *Of lentils.* boiled, and in particular those which absorb most water. Although they dull the sight and cause flatulence, yet taken with the food they check looseness of the bowels, especially when thoroughly boiled in rain water; lightly boiled however they relax the bowels. They break the pustules of sores; sores in the mouth they cleanse and dry up. An application of lentils soothes all abscesses, and especially those that are ulcerated and cracked, but

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- rimosas, oculorum autem epiphoras cum meliloto aut cotoneo. contra suppurantia cum polenta inponitur.
- 143 decoctae sucus ad oris exulcerationes et genitalium adhibetur, ad sedem cum rosaceo aut cotoneo, in iis quae acrius remedium exigant cum putamine punici melle modico adiecto. ad id demum, ne celeriter inarescat, adiciunt et betae folia. inponitur et strumis, panis vel maturis vel maturescentibus ex aceto discocta, rimis ex aqua mulsa et gangraenis cum punici tegmine, item podagris cum polenta et vulvis et renibus, pernionibus, ulceribus difficile cicatricem trahentibus. propter dissolutionem sto-
- 144 machi xxx grana lentis devorantur. in choleris quoque et dysinteria efficacior est in tribus aquis¹ cocta, in quo usus melius semper eam torrere ante et tundere, ut quam tenuissima detur vel per se vel cum cotoneo malo aut piris aut myrto aut intubo erratico aut beta nigra aut plantagine. pulmoni est inutilis et capitis dolori nervosisque omnibus et felli, nec somno facilis, et pusulis utilis ignique sacro et mammis in aqua marina decocta, in aceto autem
- 145 duritias et strumas discutit. stomachi quidem causa polentae modo potionibus inspergitur. quae sunt ambusta aqua semicocta curat, postea trita et per cribrum effuso furfure, mox procedente curatione addito melle. ex posca coquitur ad guttura. est et

¹ aquis *codd.* : aquae cyathis *Deilefsen.*

^a That is, *cholera nostras.*

for fluxes of the eyes melilot or quinces must be added. For suppurations lentils are applied with pearl barley. The juice of boiled-down lentils is applied to ulcerations of the mouth or of the genitals; for complaints of the anus rose oil or quinces must be added, and when a stronger remedy is called for pomegranate peel with a little honey as well. At this point, to prevent this mixture from drying quickly beet leaves also are added. Thoroughly boiled in vinegar they are applied also to scrofulous swellings, and to superficial abscesses whether mature or maturing; in hydromel to chaps and with pomegranate peel to gangrenes; with pearl barley also to gouty feet, the uterus, kidneys, chilblains, and to sores that are slow in forming scars. For looseness of the stomach thirty grains of lentils are swallowed. In cholera^a too and dysentery lentils are more efficacious when boiled in three waters; when so used it is always better to roast them first and pound them, that they may be administered in as fine a state as possible, whether by themselves or with quinces, or else with pears, or myrtle, or wild endive, or dark beet, or plantain. Lentils are injurious to the lungs, in headache, in all pains of the sinews and in biliousness, nor are they good for sleep; boiled in sea-water however they are beneficial for pustules, erysipelas, and affections of the breasts, while boiled in vinegar they disperse indurations and scrofulous swellings. As a stomachic they are sprinkled in drinks as is pearl barley. They are good for burns if half-cooked in water and then pounded and passed through a sieve to remove the bran, honey being added presently as the burn heals. They are boiled in vinegar and water for sore throats. There is also a marsh lentil that

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palustris lens per se nascens in aqua non profluente, refrigeratoriae naturae, propter quod collectionibus inlinitur et maxime podagris et per se et cum polenta. glutinat et interanea procidentia.

- 146 LXXI. Est silvestris elelisphacos dicta a Graecis, [aliis sphacos dicta,] sativa lente levior et folio minore atque sicciore et odoratiore. est et alterum genus eius silvestrius, odore gravi. haec mitior folia habet cotonei mali effigie, set minora et candida, quae cum ramis decocuntur. menses ciet et urinas, et pastinacae marinae ictus sanat. torporem autem obducit percusso loco. bibitur cum absinthio et dysinteriae.
- 147 cum vino eadem commorantes menses trahit, abundantes sistit decocto eius potio. per se inposita herba vulnerum sanguinem cohibet. purgat et serpentium morsus et, si in vino decoquatur, pruritus testium sedat. nostri qui nunc sunt herbarii elelisphacum Graece, salviam Latine vocant mentae similem, canam, odoratam. partus emortuos ea adposita extrahunt, item vermes ulcerum auriumque.
- 148 LXXII. Cicer et silvestre est, foliis simile, odore gravi. si largius sumatur, alvus solvitur et inflatio contrahitur et tormina. tostum salubrius habetur. cicercula etiamnum magis in alvo proficit. farina utriusque ulcera manantia capitis sanat, efficacius

^a Dioscorides III. 33 R.V. (Wellmann) says: ἐλελίσφακον . . . οἱ δὲ σφάκον. Theophrastus (H.P. VI. ii. § 5) says: σφάκος δὲ καὶ ἐλελίσφακος διαφέρουσιν ὥσαν τὸ μὲν ἡμερον τὸ δὲ ἄγριον· λεϊότερον γὰρ τὸ φύλλον τοῦ σφάκου καὶ ἐλαττον καὶ αὐχμηρότερον, τὸ δὲ τοῦ ἐλελίσφακου τραχύτερον. Pliny seems to have confused σφάκος (sage) and φακός (lentil). Most of this chapter in Pliny is confused, so that (in spite of Theophrastus) Mayhoff's retention of the MSS. reading *leviore* (with the almost impossible position of *et*) is not to be commended. Detlefsen is probably right in bracketing *aliis sphacos dicta*. At least *ab* must be added before *aliis*.

grows wild in stagnant water. These lentils are of a cooling nature, and so are applied to abscesses and in particular to gouty feet, both by themselves and with pearl barley. They also close up prolapse of the intestines.

LXXI. There is a wild lentil called elelisphacos by the Greeks [sphacos by others],^a smoother^b than the cultivated lentil, with a smaller, drier and more scented leaf. There is also another kind of it wilder still, and with a heavy smell. The other, the more cultivated variety, has leaves like those of a quince, but smaller and pale, which are boiled with the branches. It promotes menstruation and urine, and heals the wounds of the sting-ray, numbing the region affected.^c It is also taken in drink with wormwood for dysentery. With wine it also brings on delayed menstruation, while a draught of its decoction checks any excess. The plant applied by itself stanches the blood of wounds. It also cures^d snake bite, and if boiled down in wine allays pruritus of the testicles. Our modern herbalists call this plant elelisphacus in Greek and salvia in Latin, a plant like mint, hoary and aromatic. An application brings away the dead unborn baby, as well as worms in sores and ears.

LXXII. There is also a wild chickpea, with leaves like the cultivated kind and a heavy smell. Too copious a dose relaxes the bowels, and causes flatulence and colic. Roasted it is supposed to be more healthy. The small chickpea is even more beneficial to the bowels. The meal of each kind heals running sores on the head, though the wild is more

^b Some translate "lighter," but cf. Theophrastus.

^c "The sting-ray spreads numbness over the place stung" is a possible rendering of *torporem . . . loco*.

^d Or, "cleanses."

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- silvestris, item comitiales et iocinerum tumores et
 149 serpentium ictus. ciet menses et urinas, grano
 maxime. emendat et lichenas et testium inflam-
 mationes, regium morbum, hydropicos. laedunt
 omnia haec genera exulceratam vesicam et renes.
 gangraenis utiliora cum melle et his quae cacoethe
 vocantur. verrucarum in omni genere prima luna
 singulis granis singulas tangunt, eaque grana in
 linteolo deligata post se abiciunt, ita fugari vitium
 150 arbitantes. nostri praecipiunt arietinum in aqua
 cum sale discoquere, ex eo bibere cyathos binos in
 difficultatibus urinae; sic et calculos pelli¹ mor-
 bumque regium. eiusdem foliis sarmentisque de-
 coctis aqua quam maxime calida morbos pedum lenit,
 et ipsum calidum tritumque inlitum. columbini
 decocti aqua horrorem tertianae et quartanae
 minuere creditur. nigrum autem cum gallae dimidio
 tritum oculorum ulceribus ex passo medetur.
- 151 LXXIII. De ervo quaedam in mentione eius dixi-
 mus, nec potentiam ei minorem veteres quam
 brassicae tribuere, contra serpentium ictus ex aceto,
 ad crocodilorum hominumque morsum. si quis
 ervum cotidie ieiunus edit, lienem eius absumi
 certissimi auctores adfirmant. farina eius varos, sed

¹ pelli *vulg.* Mayhoff: pellit *codd.*, Dettlefsen.

* See XVIII. § 139.

efficacious, as well as epilepsy, swollen liver and snake bites. It promotes, the grain in particular, menstruation and urine; it is good for lichen, inflammation of the testicles, jaundice and dropsy. All kinds of chickpea are injurious to ulcerated bladder and to the kidneys. They are more beneficial with honey for gangrenous sores, especially for those called malignant. Warts of every kind some treat by touching each wart with a single chickpea at the new moon; the chickpeas they tie in a linen cloth and throw behind them, believing that so the warts go away. Roman authorities recommend that ram's-head chickpeas be thoroughly boiled in water with salt, two cyathi of it to be taken at a time for strangury; they hold too that this treatment brings away stone from the bladder and cures jaundice. The water in which the leaves and stalks of the chickpea have been boiled, if used as hot as possible to foment the feet, soothe gouty pains, as does an application of the plant itself, pounded up and warmed. The water from boiled columbine chickpea is believed to lessen the rigors of tertian and quartan agues. The dark kind, however, pounded up with half a gall-nut and applied in raisin wine, cures ulcers of the eyes.

LXXIII. About the bitter vetch I have said a *Bitter vetch.* few things in my note concerning it,^a a pulse to which, applied in vinegar, old authorities attributed a power no less than that they did to cabbage for snake bites and for those of crocodiles and of men. If anybody eats it fasting every day, the spleen, according to very reliable authorities, is reduced in size. Its meal removes not only pimples from the face but also spots from the skin on all parts of the

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- et maculas cutis toto corpore emendat. serpere
 ulcera ¹ non patitur, in mammis efficacissimum. car-
 152 bunculos rumpit ex vino. urinae difficultates, in-
 fflationem, vitia iocineris, tenesmon et quae cibum
 non sentiant, atrophæ appellata, tostum et in nucis
 abellanae magnitudinem melle collectum devora-
 tumque corrigit, item impetigines ex aceto coctum
 et quarto die solutum. panos in melle inpositum
 153 suppurare prohibet. aqua decocti perniones et
 pruritus sanat fovendo. quin et universo corpori, si
 quis cotidie ieiunus biberit, meliorem fieri colorem
 existimant. cibus idem hominis alienum. vomiti-
 ones movet, alvum turbat, capiti et stomacho
 onerosum. genua quoque degravat. sed made-
 factum pluribus diebus mitescit, bubus iumentisque
 utilissimum. siliquæ eius virides prius quam in-
 durescant cum suo caule foliisque contritæ capillos
 nigro colore inficiunt.
- 154 LXXIV. Lupini quoque silvestres sunt, omni modo
 minores præterquam amaritudine. ex omnibus
 quæ eduntur sicco nulli minus ponderis est nec plus
 utilitatis. mitescunt cinere aut aqua calidis. co-
 lorem hominis frequentiores in cibo exhilarant, amari
 contra aspidas valent. ulcera atra aridi decorti-
 catique triti supposito linteolo ad vivum corpus
 redigunt. strumas, parotidas in aceto cocti dis-
 155 cutiunt. sucus decoctorum cum ruta et pipere vel

¹ ulcera *Verc. (vetus editio, 1507) Mayhoff: vulnera codd.*

body. It does not allow sores to spread, being very efficacious when they are on the breasts. Applied in wine it makes carbuncles burst. Strangury, flatulence, affections of the liver, tenesmus, and atrophy, when food cannot be assimilated, are relieved by swallowing the roasted grain, held together by honey of the size of a filbert, and so are skin eruptions by a decoction in vinegar, allowed to remain on the affected part till the fourth day. An application in honey prevents superficial abscesses from suppurating. Fomentation with the water of a decoction cures chilblains and pruritus. Moreover it is thought that the whole body assumes a more healthy complexion if this decoction be taken daily on an empty stomach. At the same time this vetch makes unwholesome human food, causing vomiting, disturbing the bowels, and causing heaviness in the head and stomach, besides enfeebling the knees. Soaked, however, for several days it mellows, and is very good for cattle and beasts of burden. The pods of it, pounded green before they harden, with their own stalk and leaves, dye the hair black.

LXXIV. There are also wild lupins, with weaker *Wild lupins.* properties than the cultivated in every respect except their bitterness. Of all the things that are eaten, none is less heavy or more useful than lupins when dried. They mellow when cooked in hot ash or in hot water. Taken frequently as food they freshen the human complexion; bitter lupins are an antidote for the wound of the asp. Dried lupins, peeled and pounded, make new flesh on black ulcers if applied in a linen cloth. Boiled in vinegar they disperse scrofulous swellings and parotid abscesses. A decoction with rue and pepper is given to persons under thirty,

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- in febris datur ad ventris animalia pellenda minoribus
xxx annorum, pueris vero etiam inpositi in ventrem
ieiunis prosunt, et alio genere tostī et¹ in defruto poti,
vel ex melle sumpti. iidem aviditatem cibi faciunt,
fastidium detrahunt. farina eorum aceto subacta
papulas pruritusque in balneis inlita cohibet et per
se siccāt ulcera. livores emendat, inflammationes
156 cum polenta sedat. silvestrium efficacior vis contra
coxendicum et lumborum debilitatem. ex isdem
decocta lentigines et cutem foventium corrigunt, si
vero ad mellis crassitudinem decoquantur vel² viti-
ligines nigras et lepras emendant. sativi quoque
rumpunt carbunculos inpositi; panos, strumas
minuunt aut maturant cocti ex aceto, cicatricibus
candidum colorem reddunt; si vero caelesti aqua
discoquantur, sucus ille zmegma fit quo fovere
gangraenas, eruptiones pituitae, ulcera³ manantia
157 expediat, ad lienem bibere et cum melle haerentibus
menstruis. lieni crudi cum fico sicca triti ex aceto
inponuntur. radix quoque in aqua decocta urinas
pellit. medentur pecori cum chamaeleone herba
decocti, aqua in potum colata. sanant et scabiem
quadripedum omnium in amurca decocti vel utroque
liquore postea mixto. fumus crematorum culices
necat.
158 LXXV. Irionem inter fruges sesamae similem esse

¹ et vulg. *Detlefsen*: vel VT *Sillig*, *Mayhoff*.

² Post vel in codd. est sativi. *Del. Mayhoff*.

³ ulcera *Detlefsen*: ulcerum *Mayhoff*.

^a From several places in Celsus, e.g. VI. 6, 16A, it seems that this refers to purulent runnings from the eyes. See also Pliny XX. §§ 141, 251 and XXII. § 134.

^b See Book XVIII. § 96.

even when feverish, to drive out intestinal worms, while in the case of children they are also applied to the bowels, the patient fasting; another method is to roast them, and to give them either in boiled must as a draught or else in honey. Lupins increase the appetite, and remove squeamishness. Their meal kneaded with vinegar and applied in the bath removes pimples and pruritus, and by itself dries up ulcers. It heals bruises, and, with pearl barley, soothes inflammations. Wild lupins are more efficacious than cultivated for weakness of the hips and loins. A decoction of the same removes freckles and improves the complexion of those who use it as a fomentation. If however they are boiled down to the consistency of honey, they cure even black eruptions and leprous sores. An application of cultivated lupins also causes carbuncles to break; boiled in vinegar they reduce or mature superficial abscesses and scrofulous swellings, and restore to scars the original white of the skin; if however they are thoroughly boiled in rain water, the decoction makes a detergent with which it is good to foment gangrenes, eruptions of rheum,^a and running ulcers; and it is also good to drink it for splenic affections and, with the addition of honey, for retarded menstruation. Pounded raw with dried fig they are applied in vinegar to the spleen. The root too boiled in water is diuretic. Lupins boiled with the herb chamaeleon cure sick cattle, the water being strained off into their drink. The itch on all quadrupeds is cured by lupins boiled in lees of olive oil, or by a mixture of the lees with a decoction of lupins. The smoke of burnt lupins kills gnats.

LXXV. Irio I have said ^b when dealing with cereals *Irio*.

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diximus et a Graecis erysimon vocari, Galli velam appellant. est autem fruticosum, foliis erucae, angustioribus paulo, semine nasturtii, utilissimum tussientibus cum melle et in thoracis purulentis excretionibus. datur et regio morbo et lumborum vitiis, pleuriticis, torminibus, coeliacis. inlinitur vero parotidum et carcinomatum malis, testium ardoribus ex aqua, alias cum melle, infantibus quoque utilissimum, item sedis vitiis et articulariis morbis cum melle et fico, contra venena etiam efficax potu. medetur et suspiriosis, item fistulis cum axungia vetere ita ne intus addatur.

- 159 LXXVI. Horminum semine, ut diximus, cumino simile est, cetero porro, dotranti altitudine, duorum generum; alteri semen nigrius et oblongum—hoc ad venerem stimulandam et ad oculorum argema, albugines—altera candidius semen et rotundius. utroque tuso extrahuntur aculei ex corpore per se inlito¹ ex aqua, folia ex aceto inposita panos per se vel cum melle discutiant, item furunculos, priusquam capita faciant, omnesque acrimonias.

- 160 LXXVII. Quin et ipsae frugum pestes in aliquo sunt usu. infelix dictum est a Vergilio lolium, hoc tamen molitum, ex aceto coctum inpositumque sanat inpetigines celerius quo saepius mutatum est. medetur et podagrae aliisque doloribus cum oxymelite. ratio haec: aceti sextario uno diluuntur

¹ *Post inlito add. vel Mayhoff.*

^a See Book XVIII. § 96.

^b Mayhoff, comparing the parallel passage of Dioscorides, adds *vel*. But Dioscorides (III. 129, Wellmann) has: *καταπλασθὲν δὲ μεθ' ὕδατος . . . σκόλοπας ἐπισπᾶται.*

^c See *Georgics* I. 153.

to be like sesame, and to be called by the Greeks erysimon. The Gauls call it vela. It is a bushy plant, with leaves like those of rocket, but a little narrower, and with a seed like that of cress, being with honey very good for coughs and for expectoration of pus. It is also given for jaundice and for affections of the loins, for pleurisy, colic and coeliac troubles. It is applied moreover to parotid abscesses and to cancerous sores, in water or sometimes with honey to inflamed testicles, and is also very good for babies. With honey and figs it is used for complaints of the anus and for diseases of the joints, besides being when taken in drink efficacious against poisons. It also cures asthma, and fistulas also if mixed with old axle-grease, but care must be taken not to let the application touch the interior.

LXXVI. Horminum (clary) has a seed like cum- *Clary.*
min, as I have already ^a said, but in other respects it is like the leek. Nine inches high it is of two kinds: one has a darker seed which is oblong, being used as an aphrodisiac and for white spots and films on the eyes; the other has a paler and a rounder seed. Both when pounded draw thorns from the flesh, if applied by themselves ^b in water; the leaves applied by themselves or with honey disperse superficial abscesses, as also boils before they come to a head, and all acrid humours.

LXXVII. Moreover, the very pests of the crops *Darnel.*
are of use. Virgil called darnel "unfruitful," ^c and yet when ground and boiled in vinegar it cures impetigo, the quicker the more often the application is changed. It is also used with oxymel for gouty and other pains. The following is the prescription: in one sextarius of vinegar are melted two ounces

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mellis unciae duae. iustum est ita temperatis¹ sextariis tribus decoqui² farinae lolii sextarios II usque ad crassitudinem, calidumque inponi dolentibus membris. eadem farina extrahit ossa fracta.

- 161 LXXVIII. Miliaria appellatur herba quae necat milium. haec trita et cornu cum vino infusa podagras iumentorum dicitur sanare.

LXXIX. Bromos semen est spicam ferentis herbae. nascitur inter vitia segetis avenae genere, folia et stipula triticum imitantur. in cacuminibus dependentes parvulas veluti locustas habet. semen utile ad cataplasmata aequae atque³ hordeum et similia. prodest tussientibus succus.

- 162 LXXX. Orobanchen appellavimus necantem erum et legumina, alii cynomorion eam appellant a similitudine canini genitalis. cauliculus est sine foliis, pinguis, rubens. estur et per se et in patinis, cum tenera est, decocta.

- 163 LXXXI. Et leguminibus innascuntur bestiolae venenatae quae manus pungunt et periculum vitae adferunt, solipugarum generis. adversus has omnia eadem medentur quae contra araneos et phalangia demonstrantur. et frugum quidem haec sunt in usu medico.

- 164 LXXXII. Ex iisdem fiunt et potus, zythum in Aegypto, caelia et cerea in Hispania, cervesia et

¹ temperatis Vd *vulg. Mayhoff*: temperati E *Detlefsen*. Post temperatis lacunam cum Iano indicat *Mayhoff*.

² decoqui cum *Pintiano* (*Observationes* 1593) *Detlefsen*: decoctae *codd. Mayhoff*, qui coni. temperari . . . decoctae farinae lolii sextarium . . . calidumque (*sine* duobus [II]).

³ aequae atque *Hard.*, *Detlefsen*: atque *codd.*: ad quae *vet. lectio a Dalecampio ad marginem enotata* 1606, *Mayhoff*.

^a Apparently to administer the draught with greater ease.

of honey; the right proportion is to take three sextarii of this mixture and boil down with it two sextarii of darnel meal until it reaches a certain consistency, and then it should be applied warm to the painful limbs. Darnel meal is also used to draw out splinters of bone.

LXXVIII. *Miliaria* is a plant so called because it kills millet. Pounded and poured with wine into a horn^a it is said to cure gouty pains in beasts of burden.

LXXIX. *Bromos* is the seed of an ear-bearing plant, growing among the weeds of the corn crop, in fact a species of oat, with leaves and stalk like those of wheat, and having as it were little locusts hanging down at the head. The seed is as useful for plasters as is that of barley and similar grain. A decoction is good for coughs.

LXXX. *Dodder* I have mentioned^b as a plant that kills vetches and leguminous plants; some call it cynomorion from its likeness to a dog's genitals. Its stem is leafless, fleshy and red. It is eaten by itself or, when young, boiled in a saucepan.

LXXXI. There are poisonous insects, a species of venomous ant,^c that breed in leguminous plants, stinging the hand and endangering life. For these stings the same remedies are good as have been mentioned for spiders and the phalangium. These then are the cereals that are used in medicine.

LXXXII. From the cereals are also made beverages:^d *zythum* in Egypt, *caelia* and *cerea* in Spain,

^b Book XVIII. § 155.

^c According to Solinus, IV. 3, 6, a spider.

^d These are the various kinds of beer brewed by the ancients.

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plura genera in Gallia aliisque provinciis, quorum omnium spuma cutem feminarum in facie nutrit. nam quod ad potum ipsum attinet praestat ad vini transire mentionem atque a vite ordiri medicinas arborum.

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cervesia and several other kinds in Gaul and in other provinces; the froth of all these is used by women as a cosmetic for the face. But to come to beverages themselves, it will be best to pass on to a discussion of wine, beginning with the vine our discussion of medicines from trees.

BOOK XXIII

LIBER XXIII

I. Peracta cerealium in medendo quoque natura est omniumque quae ciborum aut florum odorumve gratia proveniunt supina tellure. non cessit his Pomona partesque ¹ medicas et pendentibus dedit, non contenta protegere arborumque umbra alere quae diximus, immo veluti indignata plus auxilii inesse his quae longius a caelo abessent quaeque postea coepissent, primum enim homini cibum fuisse inde et sic inducto caelum spectare pascique
 2 et nunc ex se posse sine frugibus. II. ergo, Hercule, artes in primis dedit vitibus, non contenta delicias etiam et odores atque unguenta omphacio et oenanthe ac massari, quae suis locis diximus, nobiliter instruxisse. plurimum, inquit, homini voluptatis ex me est; ego sucum vini, liquorem olei gigno, ego palmas et poma totque varietates, neque ut Tellus omnia per labores, aranda tauris, terenda areis, deinde saxis, ut—quando quantove opere?—

¹ partesque *codd* : artesque *coni.* Mayhoff.

^a Mayhoff's conjecture *artesque* for *partesque* is attractive, but *partes medicas* can well mean "a part to play in medicine."

^b Omphacium was the juice of the unripe grape. See XII. § 131 and Dioscorides V. 5 (χυλὸς ὀμφακός).

^c This is defined by Pliny (XII. § 132) as *vitis labruscae uva* and by Dioscorides (V. 5) as ὁ τῆς ἀγρίας ἀμπέλου καρπός.

^d Said by Pliny (XII. § 133) to be the African variety of oenanthe, and to be used only in medicine.

BOOK XXIII

I. The medicinal properties also of cereals have now been described, as well as those of all plants that spring up from the face of the earth to give us food, flowers or perfume. Their rival in bounty is Pomona, who even to hanging fruits has given healing qualities,^a not being content to protect, and to nourish with the shade of her trees, the plants I have noted. Nay, it is as though she was vexed at the thought of there being more help in things further away from heaven and coming into use later. For the earliest food of man, she called to mind, had come from trees; in this way he had been led to gaze at the heavens, and he could still obtain his food from herself without recourse to the crops of the field.

II. And so, God be praised, she bestowed healing powers on the vine in particular, not being satisfied with having richly supplied it with delicious flavours, perfumes, and unguents, in its omphacium,^b its oenanthe,^c and its massaris,^d which I have described in the proper places. "Man," she says, "enjoys through me a very great amount of pleasure. It is I who create the juice of the grape and the oil of the olive, I who create dates and fruits in great variety. I am unlike Mother Earth, all of whose gifts must be earned by toil—ploughing by bulls, beating on threshing-floors, and then grinding between mill-stones, and all to produce food at some indefinite

*Fruits and
their uses.*

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cibi fiant, at ex me parata omnia, nec cura laboranda, sed sese porrigentia ultro et, si pigeat attingere, etiam cadentia. certavit ipsa secum plusque utilitatis causa genuit etiam quam voluptatis.

- 3 III. Folia vitium et pampini capitis dolores inflammationesque corporum mitigant cum polenta, folia per se ardores stomachi ex aqua frigida, cum farina vero hordei articulares morbos. pampini triti et inpositi tumorem omnem siccant, sucus eorum^a dysintericis infusus medetur. lacrima vitium, quae veluti gummi est, lepras et lichenas et psoras nitro ante praeparatas sanat. eadem cum oleo saepius pilis inlitis psilotri effectum habet, maximeque quam virides accensae vites exudant, 4 qua et verrucae tolluntur. pampini sanguinem excreantibus et mulierum a conceptu defectioni diluti potu prosunt. cortex vitium et folia arida vulnerum sanguinem sistunt ipsumque vulnus conglutinant. vitis albae viridis tusae suco impetigines tolluntur. cinis sarmentorum vitium et vinaceorum condylomatis et sedis vitiis medetur ex aceto, item luxatis et ambustis et lienis tumori cum rosaceo et ruta et aceto. item igni sacro ex vino citra oleum 5 aspergitur et intertrigini, et pilos absumit. dant et bibendum cinerem sarmentorum ad lienis remedia

^a I.e. a vine with "white" grapes, not the *vitis alba* of § 21.

^b For these knuckle-shaped swellings see pp. 264-5, 384-5, and notes.

time and with immense labour. But my gifts are perfect before they leave me, and need no laborious preparation. They proffer themselves unasked, and if it be too much trouble to reach them, they actually fall of themselves." She has striven to outdo herself, in that she has created more for our benefit even than for our pleasure.

III. Headache and inflammations on the body are *Vines.* relieved by vine leaves and vine shoots combined with pearl barley, heartburn by the leaves alone in cold water, diseases of the joints, moreover, by the leaves mixed with barley meal. Vine shoots pounded and applied to any kind of tumour dry it up; an injection of their juice cures dysentery. The drops of the vine, which are a kind of gum, heal leprous sores, lichen, and itch, but these must first be treated with soda. They also act as a depilatory if the hair be repeatedly smeared with them and oil, and particularly those drops that exude from green vines when burnt, by which even warts are removed. An infusion of the shoots taken as a draught is good for the spitting of blood and for the fainting of women after conception. The bark and dried leaves of vines check the bleeding of wounds, and close up the wound itself. The juice of the white vine,^a extracted while the vine is still green, removes eruptions on the skin. The ash of the twigs of vines and of grape skins, applied in vinegar, heals condylomata^b and complaints of the anus; with rose oil, rue and vinegar added, it heals sprains, burns, and swollen spleen. This ash too, in wine but without oil, is sprinkled on parts affected by erysipelas or chafed, besides acting as a depilatory. The ash of the twigs sprinkled with vinegar is also given in drink as a cure for splenic complaints, the

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aceto consparsum, ita ut bini cyathi in tepida aqua bibantur utque qui biberit in lienem iaceat. claviculae ipsae quibus repunt vites tritae ex aqua potae
 6 sistunt vomitionum consuetudinem. cinis vitium cum axungia vetere contra tumores proficit, fistulas purgat, mox et persanat, nervorum dolores frigore ortos contractionesque, contusas vero partes vel cum oleo, carnes excrescentes in ossibus cum aceto et nitro, scorpionum et canum plagas cum oleo. corticis per se cinis combustis pilos reddit.¹

7 IV. Omphacium qua fieret ratione incipientis uvae pubertate in unguentorum loco docuimus. nunc ad medicinam de eo pertinentia indicabimus. sanat et quae in umore sint ulcera, ut oris, tonsillarum, genitalium. oculorum claritati plurimum confert, scabritiae genarum ulceribusque angulorum, nubeculis, ulceribus quacumque in parte manantibus, cicatricibus marcidis, ossibus purulente limosis.² mitigatur vehementia eius melle aut passo. prodest et dysintericis, sanguinem excreantibus, anginis.

¹ combustis pilos reddit *codd. et editores* : combusti pilos radit *Fröhner*.

² ossibus *codd.* : auribus *Sillig post Hard. collato Dioscoride*.

^a Fröhner's emendation would mean : "the ash of the burnt bark by itself acts as a depilatory."

^b See XII. § 130.

^c We must remember that the Romans knew nothing of spectacles or other means of rectifying poor sight. Hence their fondness for eye-salves.

^d It seems impossible to see what diseased states are referred to by the words *cicatricibus marcidis*, *ossibus purulente limosis*. *Marcidus*, withered (decayed, shrunk), is not an appropriate adjective for a scar. Forcellini, perhaps in reference to this

dose being two cyathi in lukewarm water, and the patient after taking the draught should lie down on his spleen. The very tendrils by which the vine climbs, pounded and swallowed in water, check habitual vomiting. The ash of vines with old axle grease is good for tumours, cleanses fistulas and in time heals them completely, as it does cramps, and pains in the sinews arising from chill; for bruises however it may be applied thus or with oil, for excrescences of flesh on bones it should be with vinegar and soda, for scorpion stings and dog bites, with oil. The ash of the bark by itself restores the hair on burns.^a

IV. How omphacium is made, just before the *Omphacium*. grape begins to mature, I have already described in my section on unguents^b; I will now notice its medicinal properties. It also cures sores in a moist part of the body, such as the mouth, tonsils or genitals. It is very helpful for clearness of vision,^c and is good for scabrous eyelids, sores in the corners of the eyes, films on the eyes, running sores in any part of the body, flabby scars, and bones with a slimy pus on them.^d Its strength can be modified by adding honey or raisin wine. Omphacium is also good for dysentery, spitting of blood, and quinsy.

passage, gives *flaccidus* as an equivalent. "Bones slimy purulently" is almost nonsense. Only when bones are exposed because of wounds or dangerous rodent ulcers do we see them "purulent." The truth seems to be that Pliny misread the Greek that appears in Dioscorides (V. 5) as *οἰλα πλάδαρά, ὅτα πυορροῦντα*: "flabby gums and pus in the ears." I.e. *οἰλα* has been confused with *οἰλαί* and *ὅτα* with *ὅσα*. The suggestion of Hardouin, adopted by Sillig, to read *auribus* for the *ossibus* of the MSS., clears away the second difficulty, but leaves the first untouched.

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- 8 V. Omphacio cohaeret oenanthe quam vites silvestres ferunt, dicta nobis in unguenti ratione. laudatissima in Syria, maxime circa Antiochiae et Laodiciae montes et ex alba vite. refrigerat, astringit, vulneribus inspergitur, stomacho inlinitur, utilis urinae, iocineris, capitis doloribus, dysintericis, coeliacis, cholericis, contra fastidia obolo ex aceto pota. siccat manantes¹ capitis eruptiones, efficacissima ad vitia quae sint in umidis, ideo et oris ulceribus et verendis ac sedi cum melle et croco.
- 9 alvum sistit, genarum scabritiem emendat oculorumque lacrimationes, ex vino stomachi dissolutionem, ex aqua frigida pota sanguinis excreationes. cinis eius ad collyria et ad ulcera purganda et paronychia et pterygia probatur. uritur in furno donec panis percoquatur. massaris odoribus tantum gignitur, omniaque ea aviditas humani ingenii nobilitavit rapere festinando.
- 10 VI. Maturescentium autem uvae vehementiores nigrae, ideo vinum ex his minus iucundum, suaviores albae, quoniam e tralucido facilius accipitur aer. recentes stomachum et spiritus inflatione alvum turbant, itaque in febris damnantur utique largiores. gravedinem enim capiti morbumque lethargum faciunt. innocentiores quae decerptae diu pepen-

¹ manantes *vulg.*, *Mayhoff*: manantis *codd.*, *Deilefsen* fortasse recte.

^a See XII. § 132.

^b *Pterygium* was the name either (1) of a swelling at the inner angle of the lower eyelid, or (2) of a kind of whitlow (paronychia). See Celsus VII. 7, 4 and VI. 19, 1 and *Introd.*, viii-x.

^c Or "particularly."

^d See pp. xiv and 70.

V. Closely related to omphacium is oenanthe, a *Oenanthe*. product of the wild vine; I have spoken about it in my account of unguents.^a The most popular is to be found in Syria, in particular from the white vine around the mountains of Antioch and Laodicea. It is cooling and astringent, is sprinkled on wounds and applied to the stomach, being also useful as a diuretic, for pains in the liver or head, for dysentery, coeliac affections and cholera; for nausea a dose of one obolus is taken in vinegar. It dries up running eruptions on the head, and being very efficacious for affections in moist parts of the body is used with honey and saffron for sores in the mouth and for complaints of the genitals and anus. It checks looseness of the bowels, heals scabrous eyelids and running eyes; taken in wine it cures a disordered stomach, and in cold water the spitting of blood. Its ash is valued for eye-salves, and for cleansing sores, also for whitlows and pterygia.^b It is burned in an oven until a loaf would be thoroughly cooked. Massaris is produced only for use in perfumes, and all such preparations have been made famous by the greed of the human spirit in its haste to seize them before the proper season.

VI. Of the grapes left to ripen, the dark have the stronger properties, and so the wine made from them is less agreeable; the white are the more pleasant, because air passes more readily through what is transparent. When fresh they disturb the stomach, and, by causing flatulence, the bowels. Accordingly for fever patients they are disapproved of, at any rate ^c in large quantities; for they cause heaviness in the head and the disease called lethargus.^d Less injurious are those which after being gathered have

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dere, qua ventilatione etiam utiles fiunt stomacho aegrisque, nam et refrigerant leviter et fastidium auferunt.

- 11 VII. Proximae a pensilibus in palea servatae, nam et vinaceis servatae et caput et vesicam et stomachum infestant, sistunt tamen alvum, sanguinem excreantibus utilissimae. quae in vino aut in dulci conditae fuere caput temptant¹; quae vero in musto fuere peiorem vim etiamnum habent quam quae in vinaceis. sapa quoque inutiles stomacho facit.
- 12 saluberrimas putant medici in caelesti aqua servatas, etiamsi minime iucundas, sed voluptatem earum in stomachi ardore sentiri et in amaritudine iecoris fellisque vomitionibus et in choleris, hydropicis, cum ardore febris² aegrotantibus. at in ollis servatae et os et stomachum et aviditatem excitant, paulo tamen graviore existimantur fieri vinaceorum halitu. uvae florem in cibis si edere gallinacei, uvas non attingunt.

- 13 VIII. Sarmenta earum in quibus acini fuere adstringendi vim habent, efficaciora ex ollis.

IX. Nuclei acinorum eandem vim optinent. hi sunt qui in vino capiti dolorem faciant.³ tosti tritique

¹ quae . . . temptant *ante proximae codd.*, *Detlefsen: trans. Mayhoff.*

² febris VT: febrium *ceteri codd. et editores.*

³ faciant *plures codd.*, *Detlefsen, Mayhoff: faciunt dT vulg., Sillig.*

^a I.e. must.

^b Most editors read *febrium*, putting no comma at *hydropicis*. The class referred to then becomes the very small one of dropsical patients when suffering from high fever, and *cum ardore* has to be taken as equivalent to *ardore* (instrumental). It is odd to select such a small class from out the numerous

been left to hang; this exposure to the air makes them actually beneficial to the stomach, and for sick persons, as they are slightly cooling and remove nausea.

VII. Next after those that have been hung come in value those kept in chaff; but those kept in grape skins are injurious to the head, bladder and stomach, although they check looseness of the bowels and are very beneficial to those who spit blood. Those which have been preserved in wine or "sweet wine"^a go to the head; when however they have been preserved in must they have an effect worse even than those preserved in grape skins. Concentrated must too makes them injurious to the stomach. Physicians hold that the most wholesome grapes are those kept in rain water, although they are the least pleasant to the taste; but their grateful character is felt by those suffering from heartburn, disordered liver, vomiting of bile, cholera, dropsy, and fever accompanied by high temperature.^b Those however kept in jars stimulate the palate, stomach and appetite, but they are thought to become rather heavy owing to the fumes from the skins. If chickens have eaten the flower of the vine among their food, they never touch the bunches on the vine.

VIII. Vine cuttings that have borne grapes have an astringent property, but are more efficacious if they have been kept in jars.

IX. Grape stones have the same property. It is *Grape stones*, because of them that wine causes headache. Roasted and pounded they are beneficial to the

sick folk who find grapes a refreshing food. Accordingly, I put a comma after *hydropicis* and read *febri* with two MSS. It is then possible to give to *cum* its proper sense.

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stomacho utiles sunt. inspergitur farina eorum polentae modo potioni et dysintericis et coeliacis et dissoluto stomacho. decocto etiam eorum fovere psoras et pruritus utile est.

- 14 X. Vinacei per se minus capiti aut vesicae nocent quam nuclei, mammarum inflammationi utiles cum sale. triti. decoctum eorum veteres dysintericos et coeliacos iuvat et potione et fotu. XI. Uva theriace, de qua suo loco diximus, contra serpentium ictus estur. pampinos quoque eius edendos censent inponendosque, et vinum et acetum ex his factum auxiliarem contra eadem vim habet.
- 15 XII. Uva passa quam astaphida vocant stomachum, ventrem et interanea temptaret, nisi pro remedio in ipsis acinis nuclei essent. his exemptis vesicae utilis habetur et tussi—alba utilior—utilis et arteriae et renibus, sicut ex his passum privatim e
- 16 serpentibus contra haemorrhoida potens. testium inflammationi cum farina cumini aut coriandri inponuntur, item carbunculis, articulariis morbis sine nucleis tritae cum ruta. fovere ante vino ulcera oportet. sanant epinyctidas et ceria et dysinteriam cum suis nucleis. et in oleo coctae gangraenis inlinuntur cum cortice raphani et melle, podagris et

^a Here, as the context suggests, *potio* must mean soup or gruel.

^b See XIV. § 117.

^c See XX. §§ 50, 210.

^d See XX. 44 and Introduction, pp. viii-ix.

stomach. Ground into meal they are sprinkled like pearl barley into drink ^a and taken for dysentery, coeliac affections and a disordered stomach. It is also beneficial to foment with a decoction of them itch scab and pruritus.

X. Grape skins by themselves are less injurious to *Grape skins.* the head or bladder than are the stones. Pounded and applied with salt they are good for inflammation of the breasts. A decoction of them, whether taken as drink or used as a fomentation, relieves chronic dysentery and coeliac affections.

XI. The theriac grape, about which I have spoken ^b in its proper place, is eaten to counteract the poison from the bites of serpents. The young shoots, too, of this vine are recommended to be eaten and to be applied; wine and vinegar made from these grapes are useful for the same purpose.

XII. The raisin, or astaphis as it is called, would *Raisins.* injure stomach, belly and intestines, were it not that the stones in the fruit itself acts as a corrective. When these are removed raisins are held to be useful for the bladder and for coughs, those from white grapes being the more so, useful also for the trachea and kidneys, just as the wine made from stoned raisins is specific for the poison of the serpent called haemorrhoids.^c For inflamed testicles raisins are applied with the meal of cummin or of coriander, while for carbuncles and diseases of the joints they are pounded without the stones with the addition of rue. Sores should be fomented beforehand with wine. Used with their stones they heal epinictis,^d honey-comb ulcers and dysentery. Boiled in oil they are applied to gangrenes with radish skins and honey; for gouty pains and loose nails with heal-all. They

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- unguium mobilibus cum panace, et per se ad purgandum os caputque cum pipere comanducantur.
- 17 . XIII. *Astaphis agria* sive *staphis*, quam uvam taminiam aliqui vocant falso, suum enim genus habet, cauliculis nigris, erectis, foliis labruscae, fert folliculos verius quam acinos, virides, similes ciceri, in his nucleum triangulum. maturescit cum vindemia nigrescitque, cum¹ taminiae rubentes norimus acinos sciamusque illam in apricis nasci, hanc non nisi in opacis. his nucleis ad purgationem uti non censuerim propter ancipitem strangulationem, neque ad pituitam oris siccandam, quia fauces
- 18 laedunt. phthiriasi caput et reliquum corpus triti liberant, facilius admixta sandaraca, item pruritu et psoris. ad dentium dolores decocuntur in aceto, ad aurium vitia, rheumatismos cicatricum, ulcerum manantia. flos tritus in vino contra serpentes bibitur, semen enim abdicaverim propter nimiam vim ardoris. quidam eam pituitariam vocant. plagis serpentium utique inlinunt.
- 19 XIV. *Labrusca* quoque *oenanthen* fert satis dictam,² quae a Graecis *ampelos agria* appellata, spissis et candicantibus foliis, geniculata, rimoso cortice, fert uvas rubentes cocci modo, quae cutem in facie mulierum purgant et varos, coxendicum et lumborum vitiis tusae cum foliis et suco prosunt.

¹ Cum . . . opacis] *ita transponere vult Warmington ut supra § 17 verba suum genus habet sequantur.*

² *Post dictam punctum add. Mayhoff.*

^a Pliny has again confused *οὔλα* with *οὐλαί* (see Dioscorides IV. 152, *οὔλα πνευματιζόμενα*). This chapter of D. shows close resemblances to Pliny.

are chewed by themselves for cleansing the mouth and with pepper for clearing the head.

XIII. Wild astaphis, otherwise staphis, wrongly called by some *uva taminia*—for that is a distinct plant—with dark, straight stalks and the leaves of the wild vine, bears what may be called more correctly pods rather than grapes, green and like chickpeas, with a three-cornered stone in them. It ripens at harvest time and grows dark, whereas we are familiar with the red grapes of the taminian vine, and also know that staphis grows on sunny sites, while the taminian vine is found only on shady spots. I should not recommend the use of these stones as a purge owing to the danger of choking, nor yet to dry phlegm in the mouth, because it is injurious to the throat. Pounded they rid the head of lice, as well as the rest of the body, and the more readily if sandarach be mixed with them, and also cure pruritus and itch scab. A decoction in vinegar is made for toothache, for affections of the ears, for fluxes from scars^a and for running ulcers. The pounded flowers are taken in wine to counteract the poison of serpents; the seed however I should reject because of its excessive heat. Some call the plant pituitaria. Serpent bites in particular are treated by applications of it.

XIV. Labrusca too produces oenanthe, already sufficiently described by me; it is called by the Greeks the wild vine, with thick whitish leaves, jointed stem and a bark covered with fissures. It bears grapes red like the scarlet berry, which clear the faces of women, removing blotches, while pounded and used with the leaves and juice they are good for sciatica and lumbago. A decoction of the

Staphis
(*Delphinium*
staphysagria).

Wild vine
(*Vitis*
silvestris).

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radix decocta in aqua pota in vini Coi cyathis duobus umorem alvi ciet,¹ ideo hydropicis datur. hanc potius crediderim esse quam vulgus uvam taminiam
 20 vocat. utuntur ea pro amuleto et ad expuitionem sanguinis quoque adhibent, non ultra gargarizationes et, ne quid devoretur, addito sale, thymo, aceto mulso. ideo et purgationibus ancipitem putant.

XV. Est huic similis, sed in salictis nascens. ideo distinguitur nomine, cum eosdem usus habeat, et salicastrum vocatur. scabiem et pruriginem hominum quadripedumque aceto mulso trita haec efficacius tollit.

21 XVI. Vitis alba est quam Graeci ampelon leucen, alii staphylen, alii melothron, alii psilotrum, alii archezostim, alii cedrosin, alii madon appellant. huius sarmenta longis et exilibus internodiis geniculata scandunt. folia pampinosa ad magnitudinem hederæ dividuntur ut vitium. radix alba, grandis, raphano similis initio. ex ea caules asparagi similitudine exeunt. hi decocti in cibo alvum et
 22 urinam ciet. folia et caules exulcerant corpus, utique ulcerum phagedænis et gangraenis tibiærumque taedio cum sale inlinuntur. semen in uva raris acinis dependet, suco rubente, postea crocino. novere id qui coria perficiunt, illo enim utuntur.

¹ *Post ciet VT et add.*

^a Such appears to be the meaning of *pampinosa* here, if it represents the *δαυρέρα* of Dioscorides IV. 182 (1).

^b Dioscorides has *ᾧθεν*, but I can find no instance of *utique* with the sense of "wherefore." I have translated it "in particular" here and in the neighbouring passage § 18, without feeling sure that it gives the right connection of thought.

^c *Tædium* occurs a few times in Pliny in the sense of

root in water and drunk in two cyathi of Coan wine evacuates watery humour in the belly, and for this reason is prescribed for dropsy. I am inclined to believe that it is rather this plant that is popularly called *uva taminia*. It is used as an amulet, and also for the spitting of blood; only however as a gargle, and, to prevent any of it from being swallowed, there are added salt, thyme and oxymel. For this reason it is thought unsafe to use it as a purge.

XV. There is a plant like this, but growing in willow-beds. It is therefore known by a distinct name, although it has the same uses; it is called *salicastrum*. This, pounded and applied with oxymel, is more efficacious in removing itch scab and pruritus whether in man or beast.

XVI. There is a white vine, which the Greeks White vine.
(*Bryonia cretica*). call variously *ampelos leuce*, *staphyle*, *melothron*, *psilotrum*, *archezostis*, *cedrosis*, and *madon*. Its twigs are jointed and climbing, with long, thin interstices between the knots. The leaves, thick and bushy,^a are of the size of ivy leaves, and with jagged edges like those of vine leaves. The root is white, large, and like a radish at first. From it grow out stalks like asparagus. These, boiled and taken in food, are laxative and diuretic. The leaves and the stalks free the flesh from sores, and in particular^b are applied with salt to phagedaenic ulcers, to gangrenes, and to "bad legs."^c The fruiting bunch hangs down in thinly scattered grapes, having a red juice, which turns later on to a saffron yellow. This fruit is well known to the curriers, who use it in the preparation of

phthiriasis, or rather of the weakness and irritation that accompany it. Dioscorides (IV. 182) has *σαπροκνήμων ἑλκῶν*. Cf. also note a, p. 478.

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- psoris et lepris inlinitur, lactis abundantiam facit
 23 coctum cum tritico potumque. radix numerosis
 utilitatibus nobilis contra serpentium ictus trita
 drachmis duabus bibitur. vitia cutis in facie
 varosque et lentigines et suggillata emendat et
 cicatrices, eademque praestat in oleo decocta.
 datur et comitialibus potus, item mente conmotis
 aut vertigine laborantibus, drachmae pondere
 cotidie anno toto. et ipsa autem largior aliquando
 24 sensus turbat.¹ illa vis praeclara quod ossa infracta
 extrahit in aqua inposita ut bryonia, quare quidam
 hanc albam bryoniam vocant, aliam vero nigram.
 efficacior in eodem usu cum melle et ture. suppura-
 tiones incipientes discutit, veteres maturat et purgat.
 25 ciet menses et urinam. ecligma ex ea fit suspiriosis
 et contra lateris dolores, vulsis, ruptis. splenem
 ternis obolis pota xxx diebus consumit. inlinitur
 eadem cum fico et pterygiis digitorum. ex vino
 secundas feminarum adposita trahit, et pituitam
 26 drachma pota in aqua mulsa sucus radice—colligi
 debet ante seminis maturitatem—qui inlinitus per se
 et cum ervo laetiore quodam colore et cutis teneritate
 mangonicat corpora. serpentes fugat. tunditur
 ipsa radix cum fico pingui erugatque corpus, si

¹ turbat *Cornarium secutus Ianus* : purgat *codd.*

^a It is difficult, perhaps impossible, to say when the subject is *radix* and when it is *vitis alba*. Both are singular and feminine, the difficulty beginning with the first sentence after *radix numerosis* etc.

^b See § 27.

^c Or "whitlows."

leather. It is applied to itch scab and leprous sores; if it is boiled with wheat, the decoction when drunk produces an abundance of milk in nurses. The root, famous for many uses, is pounded and taken in doses of two drachmae for snake bite. It removes spots and blotches on the face, freckles, bruises and scars; a decoction in oil is equally efficacious. It is given also in drink for epilepsy, as well as for nervous disorders and giddiness, the daily dose being a drachma by weight for a whole year.^a In larger doses, however, even the root itself sometimes disorders the senses. Its most remarkable property is that applied in water, as bryony is, it extracts splintered bones, for which reason some call it white bryony, the one they call black bryony being distinct.^b The addition of honey and frankincense makes it more effective for the same use. Incipient suppurations it disperses; those of long standing it matures and drains. It is an emmenagogue and diuretic. Out of it an electuary is made for asthma and pains in the sides, and for spasms and ruptures. Doses of three oboli taken in drink for thirty days eat up the spleen. In the form of an ointment it is also used with figs as a cure for hangnails.^c A pessary with wine brings away the afterbirth, and phlegm is brought away by a drachma dose taken in hydromel of the juice of the root—it ought to be dug up before the seed ripens—and this juice used as an ointment either by itself or with vetches shows off the body with what I may call a brighter complexion as well as with a softer skin. It keeps snakes away. The root itself pounded with a plump fig removes wrinkles from the body, but a walk of a quarter of a mile should be taken immediately after the application;

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statim bina stadia ambulentur, alias uret, nisi frigida statim abluatur. iucundius hoc idem praestat nigra vitis, quoniam alba pruritum adfert.

- 27 XVII. Est ergo et nigra, quam proprie bryoniam vocant, alii Chironiam, alii gynaecanthen aut apro-niam, similem priori, praeterquam colore; huius enim nigrum esse diximus. asparagos eius Diocles praetulit veris asparagis in cibo urinae ciendae
28 lienique minuendo. in frutectis et harundinetis maxime nascitur. radix foris nigra, intus buxexo colore.¹ ossa infracta vel efficacius extrahit quam supra dicta, cetera eadem. peculiare quod iumentorum cervicibus unice medetur. aiunt, si quis villam ea cinxerit, fugere accipitres tutasque fieri altiles.² eadem in iumento homineque flemina aut sanguinem qui se ad talos deiecerit circumligata sanat. et hactenus de vitium generibus.
- 29 XVIII. Musta differentias habent naturales has, quod sunt candida aut nigra aut inter utrumque, alia ex quibus vinum fiat, alia ex quibus passum. cura differentias innumerabiles facit, in plenum ergo haec dixisse conveniat: mustum omne stomacho inutile, venis iucundum. a balneis raptim et sine interspiratione potum necat. cantharidum naturae adversatur, item serpentibus, maxime haemorrhoidi

¹ *Post colore comma ponit Detlefsen.*

² altiles *Detlefsen*: villares alites *Mayhoff*: varia *codd.*

^a Again there is the same difficulty as occurred in §§ 23-26: do the sentences after *radix* refer to the vine, or only to its root? *Detlefsen*, who has a comma at *colore*, seems inclined to the latter view; *Mayhoff*, who has a full stop, to the former.

^b Spanish fly.

^c See XX. §§ 50, 210.

otherwise it will cause a burn unless immediately washed away in cold water. The dark vine produces this same effect more pleasantly, for the white vine causes itching.

XVII. There is then also a dark vine, which is the one properly named bryony, called by some Chironia, by others gynaecanthe or apronia, similar to the preceding except for the colour; for that is, as I have said, dark. Diocles preferred its shoots to the real asparagus as a food for promoting urine and reducing the spleen. It is to be found growing mostly in shrubberies and reed beds. Its root is dark outside, but inside of the colour of box-wood. Splintered bones are extracted by it even more effectively than by the vine mentioned above; in other respects it has the same properties.^a It is a special feature of it that it is a specific for the sores that come on the necks of beasts of burden. It is said that if one grows it round a country house hawks keep away, and the poultry are kept safe. It also heals, in beast or man, if tied round the ankles, congestion of blood that may have settled there. So much then for the various kinds of vines.

XVIII. The natural differences shown by musts *Musts.* are these. They are white, dark, or of a colour between the two: from some there can be made wine, from others raisin wine. Manufacture makes innumerable differences, so that the general survey that follows will have to suffice. All must is injurious to the stomach but comforting to the veins. If drunk rapidly after a bath without taking breath, death ensues. It is an antidote to the poisonous nature of cantharides ^b and to the bites of serpents, especially of haemorrhoids ^c and of the salamander.

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30 et salamandrae. capitis dolores facit, et gutturi inutile, prodest renibus, iocineri et interaneis, vesicae, conlevat enim ea. privatim contra buprestim valet, contra meconium, lactis coagulationem, cicutam, toxica, dorycnium, ex oleo potum redditumque vomitionibus. ad omnia infirmius album, iucundius passi mustum, et quod minorem capitis dolorem adferat.

31 XIX. Vini genera differentiasque perquam multas exposuimus et fere cuiusque proprietates. neque est ulla pars difficilior tractatu aut numerosior quippe cum sit arduum dictu pluribus prosit an noceat. praeterea quam ancipiti eventum potum statim auxilium fit aut venenum! etenim de natura ad remedia tantum pertinente nunc loquimur.

32 unum de dando eo volumen Asclepiades condidit ab eo cognominatus,¹ qui vero postea² de volumine illo disseruere innumera.³ nos ista Romana gravitate artiumque liberalium adpetentia non ut medici sed ut indices salutis humanae diligenter distinguemus. de generibus singulis disserere inmensum et inexplicabile est discordibus medicorum sententiis.

¹ cognominatus, -tum, -tis, *codd. et edd.*

² vero postea E Dellefsen : postea vero Vd Sillig : postea uno Mayhoff.

³ innumera aut innumeri *codd.*

^a A venomous beetle, causing cattle to swell up.

^b A poisonous convolvulus. It is hard to see why it, and hemlock, are not included under *toxica*. This word perhaps means here poisons used to make weapons deadly.

^c See XIV. §§ 59 ff.

^d Asclepiades, a physician of the first century B.C., was called Wine-giver (*οἰνοδόκος*). See *Anonymus Londinensis*

It causes headache, and is injurious to the throat, but good for kidneys, liver, intestines and bladder, for it makes these organs smooth. It is particularly efficacious against the buprestis,^a opium, curdled milk, hemlock, poisons and dorycnium^b; it should be taken in oil and brought up again by vomitings. For all purposes white must is the weaker; raisin must is more pleasant, besides causing less headache.

XIX. The varieties of wine, their very many differences, and most of the properties of each I have already described.^c There is no topic more difficult to handle, or more full of detail, seeing that it is hard to say whether wine does good to more people or harms them. Besides, a draught is fraught with great risk, it being uncertain whether it will immediately turn out to be a help or a poison. And indeed I shall confine my present remarks to the properties of wine as a medicine. Asclepiades composed one volume on its administration, a circumstance which gave him a nickname^d; but his commentators on it afterwards composed an endless number of them. I, with Roman seriousness and with my appetite for the liberal arts, will carefully discuss the separate details,^e not as a physician, but to point out their effect on human health. But to treat of the various kinds of wine one by one is a vast and baffling task, because medical opinion is very divided.

*The uses of
wines.*

XXIV. 31. This is strong evidence in favour of *cognominatus*. The plural *cognominatis* seems to be an emendation of one who did not see that *innumera* is governed, not by *disseruere*, but by *condidere* understood from *condidit*.

^e *Ista distinguemus*. The connection of thought seems to be: "I hope to keep these details distinct, and to discuss wines seriously (though not as a physician), because their making and use is a fine art."

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- 33 XX. Surrentinum veteres maxime probavere, sequens aetas Albanum aut Falernum et deinde alia alii iniquissimo genere decreti quod cuique gratis-simum ceteris omnibus pronuntiando; quod¹ ut constarent sententiae, quota portio tamen mortalium his generibus posset uti! iam vero nec procures unquam sinceris. eo venere mores ut nomina modo cellarum veneant, statim in lacibus vindemiae
34 adulterentur. ergo, Hercules, mirum dictu, innocentius iam est quodcumque et ignobilius. hae tamen fere² constantissimae videntur sententiae quarum mentionem fecimus. si quis hoc quoque discrimen exigit, Falernum nec in novitate nec in nimia vetustate corpori salubre est. media eius aetas a
35 xv annis incipit. in frigido³ potu stomacho utile, non item in calida. diutinae tussi sorbetur merum utiliter a ieiunis, item in quartanis. nullo aequae venae excitantur. alvum sistit, corpus alit. creditum est obscuritatem visus facere, nec prodesse nervis aut vesicae. Albana nervis utiliora, stomacho minus quae sunt dulcia, austera vel Falerno utiliora. concoctionem minus adiuvant, stomachum modice impleant; at Surrentina nullo modo, nec caput

¹ quod *codd.*: quot *Deilefsen*.

² fere *coni.* *Deilefsen*: fecere aut facere *codd.*

³ in frigido *Sillig, Deilefsen*: frigido *Mayhoff*: rigido *codd.*

^a Or "sinews." Nerves and sinews were not yet distinguished. Spencer says (on Celsus II. 8. § 40) that all fibrous tissues and membranes, which were regarded as the vitally active parts, were designated by *nervi*. The soft material in the nervous system and muscles was called *caro*, and looked upon as padding.

XX. In the past there was a strong preference for the wine of Surrentum, followed by one for Alban or Falernian; after that various choices have been popular, each man—so unreasonable are we in our judgments—dictating to everybody else a preference for what he himself finds most pleasant; and yet even with uniformity of opinion how small a part of mankind could make use of these kinds of wine. Today indeed not even our nobility ever enjoys wines that are genuine. So low has our commercial honesty sunk that only the names of the vintages are sold, the wines being adulterated as soon they are poured into the vats. Accordingly, strange indeed as the remark may seem, the more common a wine is today, the freer it is from impurities. Nevertheless, the opinions of the wines we have mentioned seem on the whole the best maintained. If anyone lays stress also on the test of age, that Falernian is wholesome which is neither new nor too old; its middle age begins when it is fifteen years old. Taken as a cold draught it is good for the stomach, but in hot water it is not. For chronic cough and likewise for quartan ague it is swallowed with benefit neat and on an empty stomach. No other wine quickens so much the action of the veins. Astringent to the bowels it puts flesh on the body. It is a firm belief that this wine injures the vision and is not beneficial to nerves^a or to the bladder. Alban wines are better for the nerves, the sweet ones less so to the stomach, while the dry are even more beneficial than the Falernian. They aid digestion less and tend to overload the stomach, but the wines of Surrentum have no such bad effects, nor do they go to the head, while they check catarrhs of the

*The various
kinds of
wine.*

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temptant, stomachi et intestinorum rheumatismos cohibent. Caecuba iam non gignuntur.

36 XXI. Et quae supersunt Setina concoqui cibos cogunt. virium plus Surrentino, austeritatis Albano, vehementiae minus Falerno habent. ab his Statana non longo intervallo afuerint. alvo citae Signinum maxime conducere indubitatum est.

37 XXII. Reliqua in commune dicuntur. Vino aluntur vires, sanguis colosque hominum. hoc distat orbis medius et mitior plaga a circumiectis. quantum illis feritas facit roboris, tantum nobis hic succus. lactis potus ossa alit, frugum nervos, aqua carnes. ideo minus ruboris est in corporibus illis et minus
38 roboris contraque labores patientiae. vino modico nervi iuvantur, copiosiore laeduntur, sic et oculi. stomachus recreatur et adpetentia ciborum invitatur, tristitia, cura hebetatur, urina et alor expellitur, somnus conciliatur. praeterea vomitiones sistit, collectiones extra lanis umidis impositis mitigat. Asclepiades utilitatem vini aequari vix deorum potentia posse pronuntiavit. vetus copiosiore aqua miscetur; quo magis urinam expellit, minus siti resistit. dulce minus inebriat, sed stomacho innatat,
39 austerum facilius concoquitur. levissimum est quod

^a *Statana vina* were produced in Campania on the *Falernus ager*.

^b Or, "nerves."

stomach and intestines. Caecuban wines are no longer produced.

XXI. Of the wines still produced, those of Setia ensure digestion; they have more body than Surrentine wine, more dryness than Alban and less potency than Falernian. Not much inferior to them will be found the Statan^a wines. It is a firm belief that the wines of Signia are very beneficial to disordered bowels.

XXII. The other considerations will be combined in a general description. By wine are improved men's strength, blood and complexion. Wine it is that distinguishes the middle or temperate zone from the two that lie on either side of it. All the strength produced by the cruel extremes we of the temperate clime derive from the juice of the grape. Bone is nourished by drinking milk, sinews by the beers, and flesh by water. Accordingly, the drinkers of such have a less ruddy complexion, less strength, and less power to endure toil. Wine in moderation strengthens the sinews^b; excess is injurious to them, as it is also to the eyes. Wine is a tonic to the stomach and a sharpener of the appetite; it dulls sorrow and anxiety, expels urine and chills, and induces sleep. In addition it checks vomiting, and pieces of wool, soaked in wine and applied externally, soften abscesses. Asclepiades asserted that the usefulness of wine is hardly exceeded by the power of the gods. Old wine is diluted with a larger proportion of water, and while being for this reason a more powerful diuretic quenches thirst less effectively. Sweet wine is less inebriating but floats in the stomach; but a dry wine is more easily digested. The lightest wine is that which matures most

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celerrime inveteratur. minus infestat nervos quod vetustate dulcescit. stomacho minus utile est pingue, nigrum,¹ sed corpora magis alit. tenue et austerum minus alit, magis stomachum nutrit. celerius per urinam transit, tanto magis capita temptat. hoc et in omni alio suco semel dictum sit. vinum situ non² fumo inveteratum saluberrimum.³

- 40 mangones ita⁴ in apothecis excogitavere, iam et patresfamilias, aetatem addi antequam⁵ per se cariem traxere. quo certe vocabulo satis consilii dedere prisci, quoniam et in materiis cariem fumus erodit, at nos e diverso fumi amaritudine vetustatem indui persuasum habemus. quae sunt admodum exalbida, haec vetustate insalubria fiunt. quo generosius vinum est, hoc magis vetustate crassescit et in amaritudinem corpori minime utilem coit. condire eo aliud minus annosum insalubre est. sua cuique vino saliva innocentissima est, sua cuique aetas gratissima, hoc est media.

- 41 XXIII. Corpus augere volentibus aut mollire alvum conducit inter cibos bibere, contra minuentibus

¹ nigrum plures codd., Mayhoff: merum cum uno cod. Dellefsen.

² situ non Io. Müller: diutino Mayhoff: sit vinum codd.

³ saluberrimum unus cod., Dellefsen: insaluberrimum Mayhoff: vi saluberrimum unus cod.

⁴ ita Mayhoff: istut Dellefsen: ista aut istat codd.

⁵ antequam coni. Mayhoff (atqui scribit): aliis quae Dellefsen: atque aut his quae codd.

^a Or, "nerves." See p. 436, note a.

^b With the reading *merum*, "neat."

^c The text is in great disorder here, and the translator is also troubled by having no English word which could apply to over-ripe wine and also to rotting wood. *Traxere* could also mean "have delayed," and then the passage (with *aliis quae*)

quickly. That wine is less injurious to the sinews^a that sweetens as it ages. Less beneficial to the stomach is the wine that is rich and dark^b; it is, however, more flesh-forming. A thin, dry wine is less flesh-forming, but is more nourishing to the stomach, and passes more rapidly by means of urine, going, however, all the more to the head; this remark may be taken once and for all to apply to every other intoxicating liquor. Wine matured by age and not by smoke is the most wholesome. Wine-dealers first discovered the device, adopted today also by householders as well, of adding age in the storeroom to wines before they have acquired cariosity naturally.^c By using the word "cariosity" the men of old gave sound enough advice, since smoke eats out cariosity even in timber, but we moderns on the contrary are convinced that the bitterness of smoke produces in wines the character of age. Wines that are of a very pale colour become unwholesome as they grow older. The more generous a wine is the thicker it becomes with age, contracting a bitter taste,^d which is very injurious to health, and to spice a less mature wine with it is also unwholesome. Each wine has its peculiar flavour, the presence of which is a sign of great purity^e; each wine has an age—its middle age—when it is most pleasant.

XXIII. Those who want to put on flesh or to relax the bowels are benefited by drinking during meals; those on the other hand who are reducing weight and

would mean that smoke was used to mellow wines that did not ripen quickly enough by themselves.

^a Or, "condensing to a bitterness."

^e Or, "wholesomeness."

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alvumque cohibentibus sitire in edendo, postea parum bibere. vinum ieiunos bibere novicio invento inutilissimum est curiosis¹ vigoremque animi ad procinctum tendentibus, somno vero ac securitatibus iamdudum hoc fuit quod Homericæ illa Helena ante cibum ministravit. sic quoque in proverbium cessit
 42 sapientiam vino obumbrari. vino demus homines quod soli animalium non sitientes bibimus. aquae potum interponere utilissimum, itemque iugi² superbibere. ebrietatem quidem frigidae potus
 43 extemplo discutit. meracis potionibus per xx dies ante canis ortum totidemque postea suadet Hesiodus uti. merum quidem remedio est contra cicutas, coriandrum, aconita, viscum, meconium, argentum vivum, apes, vespas, crabrones, phalangia, serpentium scorpionumque ictus contraque omnia quae refrigerando nocent, privatim contra haemorrhoidas, presteras, fungos, item contra inflationes rosionesque praecordiorum et quorum stomachus in vomitiones effunditur, et si venter aut interanea rheumatismum sentiant, dysintericis, sudatoribus e longa tussi, in
 44 epiphoris meracum. cardiacis in mamma laeva merum in spongia inponi prodest, ad omnia autem maxime album inveterascens. utiliter et fovetur vino calido virilitas, iumentis infusum cornu lassiti-

¹ curiosi *Mayhoff*: curis aut cum suis *codd.*

² iugi *codd.*: iugis *coni.* *Mayhoff.*

^a *Odyssey* IV. 220.

^b *Works and Days*, 590-596.

^c *Meracum* seems to mean slightly diluted wine; *merum* absolutely neat wine.

^d For the cardiac disease see Celsus III. 19. Sometimes it means heart-burn, but Celsus calls one kind of it a serious

checking looseness of the bowels should not drink at all at meals and but sparingly after. To drink while fasting is a recent innovation that is very injurious to those absorbed in business and trying to keep their mind actively on the alert. In order to induce sleep, however, and to banish worries wine was so taken long ago, as we see from Homer's ^a Helena, who served wine before food. So too it passed into a proverb that "wine befogs the wits." It is to wine that we men should attribute the fact that of animals we alone drink when we are not thirsty. To drink water at intervals during bouts is very helpful, as it is also to drink it after a prolonged bout. Intoxication indeed is immediately banished by a draught of cold water. Hesiod ^b recommends the use of strong ^c draughts of wine for twenty days before and twenty days after the rising of the Dog-star. Neat wine indeed is a remedy for poison by hemlock, coriander, henbane, mistletoe, opium, mercury, for the wounds of bees, wasps, hornets, spiders, snakes and scorpions, and for all poisons that harm by chilling, especially for those of the haemorrhoids, the prester, and of tree fungi; also for flatulence and gnawings of the hypochondria, for violent vomitings from the stomach, and if the belly or intestines suffer from catarrh; for dysentery, and for sweats after prolonged coughing, while, for eye-fluxes the wine should be slightly diluted. For cardiac ^d affections it is beneficial to apply to the left breast neat wine on a sponge; but for all these purposes the best to use is white wine that is growing old. It is also useful to foment the testicles with warm wine, and administered through

disease, some form of syncope or collapse. The latter seems to be the meaning in § 50, and therefore perhaps here also.

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dinem aufert. simias quadripedesque quibus digiti sunt negant crescere adsuetas meri potu.

- 45 XXIV. Nunc circa aegritudines sermo de vinis erit. saluberrimum liberaliter genitis Campaniae quodcumque tenuissimum, vulgo vero quod quemque maxime iuverit validum. utilissimum omnibus sacco viribus fractis. meminerimus sucum esse qui fervendo vires e musto sibi fecerit. misceri plura genera omnibus inutile. saluberrimum cui nihil in musta additum est, meliusque, si nec vasis pix adfuit. marmore enim et gypso aut calce condita
- 46 quis non et validus expaverit? in primis igitur vinum marina aqua factum inutile est stomacho, nervis, vesicae. resina condita frigidis stomachis utilia existimantur, non expedire vomitionibus, sicut neque sapa neque passum. novicium resinatum nulli conducit, capitis dolorem et vertigines facit. ab hoc dicta crapula est. tussientibus et in rheumatismo nominata prosunt, item coeliacis et dysintericis, mulierum mensibus. in hoc genere rubrum nigrumve magis constringit magisque calefacit. innocentius pice sola conditum. set et picem meminisse debemus non aliud esse quam
- 47 conbustae resinae fluxum. hoc genus vini excalfacit,

^a Le. "hang-over."

a horn to beasts of burden it removes fatigue. Apes and quadrupeds with fingers are said to stop growing if they acquire the habit of drinking neat wine.

XXIV. Now I shall discuss wines in relation to sickness. The most wholesome for gentry are the thinnest wines of Campania; the common sort however may drink what each most fancies, provided that he is in robust health. Wines are most beneficial when all their potency has been overcome by the strainer. We must remember that wine is grape juice that has acquired strength by fermentation. A mixture of several sorts of wine is injurious to anybody. The most wholesome wine is that to which nothing has been added in the state of must, and it is better if not even the wine-vessels have been touched by pitch. As for wines treated with marble, gypsum or lime, who would not dread to touch them, however robust his health? Wine therefore prepared with sea-water is particularly injurious to the stomach, to the sinews and to the bladder. Wines seasoned with resin are supposed to be beneficial to cold stomachs but unsuited to those inclined to vomit, just as boiled-down must, and raisin wine, so seasoned, are also unsuitable. New wine seasoned with resin is good for nobody, causing headache and fits of giddiness. For this reason it has been named *crapula*.^a The wines already mentioned are good for coughs and catarrhs, as also for coeliac troubles and dysentery, and for the menstruation of women. In this class the red or dark wine is more astringent and more heating. Less harmful is wine seasoned with pitch and with nothing else, but we ought to remember that pitch is nothing but the liquid from burnt resin. This kind of wine heats, digests,

*Medicinal
uses of wine.*

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concoquit, purgat, pectori, ventri utile, item vulvarum dolori, si sine febris sint, veteri rheumatismo, exulcerationi, ruptis, convulsis, vomicis, nervorum infirmitati, inflationibus, tussi, anhelationibus, luxatis in sucida lana inpositum. ad omnia haec utilius id quod sponte naturae suae picem resipit picatumque appellatur Helvico in pago,¹ quo tamen
 48 nimio caput temptari convenit. quod ad febrium valitudines attinet certum est non dandum in febris nisi veteribus aegris nec nisi declinante morbo, in acutis vero periculis nullis nisi qui manifestas remissiones habeant, et has ² noctu potius—dimidia pars periculi est noctu, hoc est spe somni, bibentibus—nec a partu abortive nec a libidine aegrotantibus, nec in capitis doloribus, nec quorum accessiones cum frigore extremitatum fient, nec in febris tussientibus, nec in tremore nervorumve ³ doloribus vel faucium, aut si vis morbi circa ilia intellegatur, nec in duritia praecordiorum, venarum vehementia, neque in
 49 opisthotono, nec tetano, nec singultientibus, nec si cum febris dyspnoea sit, minime vero oculis rigentibus et ⁴ stantibus aut defectis gravibusque, nec quorum coniventium perlucebunt oculi palpebrisve non coeuntibus, vel si dormientibus hoc idem

¹ Helvico in pago, quo *Mayhoff*: Helvenco pago, quo *Detlefsen*: Helvetico in agro, quo *Ian.*: *varia codd.*

² has *codd. et editiones*: his *coni. Mayhoff*.

³ nervorumve cum duobus *codd. Mayhoff*: nervorumque *vulg.*, *Detlefsen*: nervorum vel cum aliquot *codd. Sillig.*

⁴ et ego: et *genis Detlefsen*: e *genis Mayhoff*: e *gentis codd.*

^a In Gallia Narbonensis.

^b Less probably: "the disease be of long standing."

^c With *Mayhoff's his* "to these" *i.e.* patients; *has* refers to *remissiones*.

cleanses, is beneficial to chest and bowels, and also for pain in the uterus if there be no fever, for chronic catarrh, ulceration, rupture, spasms, abscesses, weak sinews, flatulence, cough, asthma, and for sprains if it be applied on unwashed wool. For all these purposes that wine is more beneficial which has naturally the flavour of pitch and is called pitchy wine in the Helvian district,^a although taken in excess it flies, as is generally agreed, to the head. As far as fevers are concerned, wine should undoubtedly not be given when fever is present unless the patient be old,^b and then only when the disease has passed the crisis; in acute diseases only when the patients experience undoubted remissions, and these^c by preference at night—there is only half the danger for those who drink at night, that is, to induce sleep—nor should it be taken after delivery or a miscarriage, nor by those ill through sexual excess, nor with headache, nor when exacerbations are attended with chill in the extremities, nor in feverish coughs, tremulousness, pains in the sinews or throat, or if the violence of the disease is felt in the region of the groin; nor is it suitable when there is induration of the hypochondria, violent throbbing of the veins, nor in opisthotonus or tetanus, nor in hiccoughs, nor if there be difficulty of breathing accompanied by fever; least of all if the eyes be rigid and staring, or weak and heavy, nor should it be given when the eyes of those who have closed them are full of light,^d or when the lids do not cover them, or when

^a Probably when the patient perceives bright light, or perhaps “sees stars”, when his eyes are closed. Verbally it seems to mean: “when the eyes of those who have closed them still shine through.”

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eveniet aut si cruore suffunduntur oculi, vel si lemae in oculis erunt, minime lingua fungosa et ¹ gravi et subinde imperfecta loquentibus, nec si urina difficile reddetur, neque expavescentibus repente, nec spasticis aut rursus torpentibus, nec si per somnos genitura effundetur.

- 50 XXV. Cardiacorum morbo unicam spem in ² vino esse certum est. sed id dandum non nisi in accessione censeant, alii non nisi in remissione, illi, ut sudorem coerceant, hi, quia tutius putant minuente se morbo, quam plurium sententiam esse video. dari utique non nisi in cibo debet, nec a somno, nec praecedente
- 51 alio potu, hoc est utique sitienti, nec nisi in desperatione suprema, et viro facilius quam feminae, seni quam iuveni, iuveni quam puero, hieme quam aestate, adsuētis potius quam expertibus. modus dandi pro vehementia vini, item mixtura aquae. vulgo satis putant unum cyathum duobus aquae misceri. si dissolutio sit stomachi, dandum, si cibus non descendat, iterum.³
- 52 XXVI. Vini genera quae fingi docuimus nec fieri iam arbitror et supervacuum eorum usum,⁴ cum ipsis rebus ex quibus finguntur doceamus uti. et alias

¹ et cod. a: nec plures codd., vulg., Delefsen: vel vet. Dal., Mayhoff.

² in vulg., Delefsen: hanc e Mayhoff: hanc codd.

³ iterum Urlichs: inter (ad sequentem sententiam relatum) codd.

⁴ eorum usum Delefsen, Mayhoff: est eorum usum docere Sillig.

* With the reading *nec*: "nor when it is heavy and speech is blurred from time to time."

the same thing happens in sleep, or if the eyes be bloodshot or rheum should form in the corners; certainly not if the tongue be furred ^a and heavy, and speech is blurred from time to time; nor in dysuria, nor in sudden frights, nor to those who are in convulsions, or again comatose, nor if the seed be emitted in sleep.

XXV. In cardiac disease the one hope of relief lies undoubtedly in wine. Some however think that it should be given only during an attack, others only when there is a remission; the object of the former is to control the sweating, the latter think that there is increased safety when the disease is on the decline, most authorities, I notice, holding this view. It ought at any rate to be given only with food, not after sleep nor after another kind of drink—that is, there must at any rate be thirst—only in the last resort and to a man rather than a woman, to an old man rather than to a young one, to a young man rather than to a boy, in winter rather than in summer, to those used to wine rather than to teetotalers. The dose to be taken depends upon the potency of the wine and also on the amount of water added. The general opinion is that a satisfactory mixture is one cyathus of wine to two of water. If the stomach be disordered, should the food not pass down, the wine must be given once more.

XXVI. The artificial kinds of wines, the preparation of which I have mentioned,^b I think to be no longer made and their use superfluous, since I give instructions about the use of the ingredients themselves of which they are composed. In other respects the pretence

*Artificial
wines.*

^b See XIV. § 98 ff.

PLINY: NATURAL HISTORY

- modum excesserat medicorum in his ostentatio, veluti a naxis vinum utile esse ab armorum equitandive lassitudine praecipientium atque, ut reliqua omittamus, etiam e iunipiro. et quis satius censeat apsinthite vino utendum potius quam apsinthio ipso? in reliquis omittatur et palmeum capiti noxium, ventrique tantum molliendo et sanguinem excreantibus non inutile. ficticium non potest videri quod
 53 bion appellavimus, cum sit in eo sola pro arte festinatio. prodest stomacho dissoluto aut cibos non perficienti, praegnantibus, defectis, paralyticis, tremulis, vertigini, torminibus, ischiadicis. in pestilentia quoque ac peregrinationibus vim magnam auxiliandi habere dicitur.
- 54 XXVII. Vini etiam vitium transit in remedia.¹ aceto summa vis est in refrigerando, non tamen minor in discutiendo; ita fit ut infuso terra spumet. dictum est saepius diceturque quotiens cum aliis prosit. per se haustum fastidia discutit, singultus cohibet, sternumenta olfactatum. in balineis aestus arcet, si contineatur ore. quin et cum aqua bibitur multorum stomacho utiliter convalescentium et²
 55 gargarizatur cum eadem a solis ardoribus. oculis quoque illo modo saluberrimum fotu. medetur potis hirudinibus, item lepris, furfuribus, ulceribus manantibus, canis morsibus, scorpionum ictibus, scolopendrarum, muris aranei contraque omnium aculeatorum venena et pruritus, item contra

¹ *Non post remedia sed post aceto dist. Mayhoff.*

² *convalescentium et post eadem codd.: ego transposui: dist. alii aliter edd. Fortasse latet lacuna ante a solis ardoribus.*

^a *I.e. at the time when the making of these wines ceased. Perhaps however the pluperfect is aoristic like dixerat Aeneas.*

^b See XIV. § 77.

of physicians about these had exceeded ^a all bounds; for instance, they prescribed new wine as beneficial for fatigue after military exercises or riding, and to pass over the others, they recommended even juniper wine. And who would prefer to use wormwood wine rather than wormwood itself? Among the rest let me omit also palm wine, which is injurious to the head, and only useful as a laxative and to relieve the spitting of blood. That wine cannot be considered artificial which I have called bion,^b for there is nothing artificial about it except the gathering of unripe grapes. It is good for a disordered stomach or a weak digestion, for pregnancy, faintness, paralysis, trembling, giddiness, colic, and sciatica. In time of plague too, and on travels, it is said to be a powerful aid.

XXVII. Even when sour, wine still has uses as a *Vinegar and its uses.* remedy. Vinegar has very great cooling qualities, being equally efficacious, however, as a resolvent; earth in fact effervesces when vinegar is poured on it. I have often said, and shall often have to say, how often it is a beneficial ingredient with other things. Drunk by itself it removes nausea and checks hiccough, and to smell it stops sneezing. Kept in the mouth it moderates excessive heat in the bath. Further, drunk with water it is a useful digestive to many when they are convalescing, and a gargle of vinegar and water is a good thing after sunstroke, the eyes too being greatly benefited by fomentation with the same mixture. It is a remedy after swallowing a leech, as well as for leprous sores, scurf, running sores, dog bites, the wounds of scorpions, of the scolopendra and of the shrew-mouse; it is also an antidote for the poison and irritation caused by all

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multipedae morsum. calidum in spongea aut¹
 adiecto sulphuris sextante sextariis tribus aut hysopi
 fasciculo medetur et sedis vitiis; in sanguinis
 fluctione post excisos calculos et omni alia foris in
 spongea inpositum, intus potum cyathis binis quam
 56 acerrimum. conglobatum utique sanguinem dis-
 cutit. contra lichenas et bibitur et inponitur.
 sistit alvum et rheumatismos interaneorum infusum,
 item procidentia² sedis vulvaeque. tussim veterem
 inhibet et gutturis rheumatismos, orthopnoeam,
 dentium labefactionem. vesicae nocet nervorum-
 que infirmitatibus. nesciere medici quantum contra
 aspidas polleret. nuper ab aspide calcata percussus
 utrem aceti ferens quotiens deposuisset sentiebat
 ictum, alias inlaeso similis. intellectum ibi remedium
 57 est potuque succursum. neque aliter os colluunt
 venena exsugentes. in totum domitrix vis haec non
 ciborum modo est, verum et rerum plurimarum.
 saxa rumpit infusum quae non ruperit ignis ante-
 cedens. cibos quidem et sapes non alius magis
 sucus commendat aut excitat, in quo usu mitigatur
 unto pane aut cumino,³ vel accenditur pipere ac
 58 lasere, utique sale conpescitur. non est praetereun-

¹ aut adiecto *codd.* : adiecto aut *Mayhoff*, qui etiam punctum posuit post fasciculo. *Hanc et sequentem sententiam dist. ego.*

² procidentia *codd.* : procidentias *Mayhoff*.

³ cumino *vetus cod. Cornarii* : cum vino *codd.*

stinging animals and for the bite of the multipede. Applied warm on a sponge, with either two ounces of sulphur or a bunch of hyssop added to three sextarii of vinegar, it is also a remedy for troubles of the anus. For haemorrhage after excision of stone, or any other, it is applied externally on a sponge, and doses of two cyathi of the strongest vinegar are taken internally. It certainly disperses clotted blood. In the treatment of lichens it is used both internally and externally. Injected it checks looseness of the bowels and catarrh of the intestines, and it is similarly employed for prolapse of the anus and of the uterus. It arrests chronic cough, catarrh of the throat, orthopnoea, and looseness of the teeth. It is injurious to the bladder and to weak sinews. Its great efficacy as an antidote for asp bite was unknown to physicians, but recently a man who was bitten by an asp on which he trod while carrying a skin of vinegar felt the wound every time he put the skin down, but at other times it was as though he had never been bitten. He inferred that vinegar was an antidote and was relieved by taking a draught of it. And it is similarly with vinegar that those rinse out their mouth who suck poison from wounds. Its all-embracing potency is not confined to foods, but includes also very many things; poured on rocks it splits them when attempts to do so with fire have failed. No other sauce serves so well to season food or to heighten a flavour; when used for which purpose its effect is lessened by burnt bread or cummin, or heightened by pepper and laserwort, and without fail is kept in check by salt. On this point I must not pass over a striking illustration of the power of vinegar. In the last years of his life

PLINY : NATURAL HISTORY

dum in eo exemplum ingens, siquidem M. Agrippa supremis suis annis conflictatus gravi morbo pedum, cum dolorem eum perpeti nequiret, unius¹ medicorum portentosa scientia² ignorante divo Augusto tanti putavit usu pedum sensuque omni carere, dummodo et dolore illo careret, demersis in acetum calidum cruribus in acerrimo impetu morbi.

59 XXVIII. Acetum scillinum inveteratum magis probatur. prodest super ea quae diximus acescen-
tibus,³—gustatum enim discutit poenam eam—et his qui ieiuni vomant,—callum enim faucium facit ac stomachi—odorem oris tollit, gingivas adstringit, dentes firmat, colorem meliorem praestat. tarditatem quoque aurium gargarizatione purgat et transitum auditus aperit. oculorum aciem obiter exacuit, comitialibus, melancholicis, vertigini, volvarum strangulationibus, percussis aut praecipitatis et ob id sanguine conglobato, nervis infirmis, renium vitiis perquam utile, cavendum exulceratis.

60 XXIX. Oxymeli antiqui, ut Dieuches tradit, hoc modo temperabant; mellis minas decem, aceti veteris heminas quinque, salis marini pondo libram quadrantem, aquae⁴ sextarios quinque pariter coquebant deciens defervescente cortina, atque ita

¹ unius *codd.* : usus *Detlefsen*.

² scientia *codd.* : sententia *coni.* *Mayhoff*.

³ *Addunt hic* cibus E, *vulg.*, *Mayhoff*.

⁴ aquae *coni.* *Ianus* : aquae marinae *codd.*

^a The story seems incomplete, as we are informed neither why there was a risk nor what was the result of the experiment. Furthermore, why should Augustus be kept in ignorance of what is, after all, very simple treatment? I suspect a *lacuna* or *lacunae*.

M. Agrippa was afflicted with grievous gout, and could not endure the pain. Guided by the wonderful skill of one of his physicians, and without informing the late Augustus—so strong the urge to be rid of that pain even at the price of losing all power to use his feet and all sensation in them—he plunged his legs into hot vinegar when a paroxysm of the disease was at its worst.^a

XXVIII. Squill vinegar is supposed to improve with age. Besides the uses I have mentioned,^b it is good when foods turn sour on the stomach, a mere taste dispersing that inconvenience, and for those who vomit fasting, for it makes hard the skin of the throat and gullet; it removes offensive breath, braces the gums, strengthens the teeth and improves the complexion. By its use as a gargle it clears hardness of hearing, opening the ear passages. Incidentally it sharpens the eyesight, and is very beneficial for epilepsy, melancholia, giddiness, hysterical suffocations, blows or falls with clotted blood in consequence, weakness of the sinews, and affections of the kidneys—but it must be avoided when there is ulceration.

XXIX. The ancients, as Dieuches tells us, prepared *Oxymel*. oxymel in the following manner.^c Ten minae of honey, five heminae of old vinegar, a pound and a quarter by weight of sea salt and five sextarii of water, were boiled together in a cauldron, but taken off the boil ten times, when it was poured off and put

^b See XX. § 98 foll.

^c See Dioscorides V. 14: λαβὼν ὄξους κοτύλας πέντε καὶ ἄλως θαλασσίον μνᾶν μίαν, μέλιτος μνᾶς δέκα, ὕδατος κοτύλας δέκα, μείζας ἔψησον, ἄχρις οὗ ἂν δεκάκις ἀναβράσῃ, καὶ ψύξας κατὰγγυσον.

PLINY : NATURAL HISTORY

- 61 diffundebant inveterabantque. sustulit totum id Asclepiades coarguitque, —nam etiam in febribus databant—profuisse tamen fatetur¹ contra serpentes quas sepos vocant et contra meconium ac viscum, et anginis calidum gargarizatum et auribus, oris gutturisque desideriiis, quae nunc omnia oxyalme contingunt, id est sale et aceto recente, efficacius.
- 62 XXX. Vino cognata res sapa est musto decocto donec tertia pars supersit. ex albo hoc melius. usus contra cantharidas, buprestim, pinorum erucas quas pityocampas vocant, salamandras, contra mordentia venenata. secundas partusque emortuos trahit cum bulbis potum. Fabianus auctor est venenum esse, si quis ieiunus a balineis id bibat.
- 63 XXXI. Consequens horum est faex sui cuiusque generis. ergo vini faecibus tanta vis est ut descendentes in cupas enecet. experimentum demissa praebet lucerna quamdiu extinguitur periculum denuntians. inlota miscetur medicamentis, cum iridis vero pari pondere eruptionibus pituitae inlinitur, et sicca vel madida contra phalangia et testium mammarumque inflammationi vel in quacumque parte corporis, item cum hordeacia farina et turis
- 64 polline in vino cocta. crematur et siccata. experimentum est legitime coctae ut refrigerata linguam tactu videatur urere. celerrime exanimatur loco non incluso² condita. crematio ei multum virium

¹ fatetur *coni. Sillig* : fatentur *codd.*

² loco non incluso *Deilefsen cum aliquot codd.* : non inclusa *Mayhoff cum aliis.*

^a Cf. XXVIII. § 183 *impetus pituitae in facie.*

^b Dioscorides V. 114: *καυστέον δὲ . . . προεξηραμμένην.*

away to keep. Asclepiades condemned it, and did away with its use altogether—for it used to be given even in fevers—yet he admits that it was beneficial for the bites of the serpent called seps, and for poisoning by opium or mistletoe. It made a warm gargle for quinsy, with benefit to the ears also and to the mouth and throat when affected. For all these purposes they now spray, getting better results, with oxyalme, that is, with salt and fresh vinegar.

XXX. Related to wine is sapa, which is must *Sapa.* boiled down until one third remains. That made from white must is the better. It is used as an antidote to cantharides, buprestis, pine caterpillars, which are called pityocampae, salamanders, and to all poisonous bites. Taken in drink with onions it brings away the after-birth and also the dead foetus. Fabianus states that it is poisonous if a man drinks it fasting just after a bath.

XXXI. Next in order come the lees of these *Lees, (a) of wine;* several liquids. The lees of wine then are so potent that they are fatal to any who go down into the vats. A lamp let down makes a good test; so long as it goes out danger is indicated. Unrinsed lees are an ingredient of medicines; moreover, with an equal weight of iris they make a liniment for phlegmatic eruptions ^a; dry or moist they are applied to the stings of venomous spiders, to inflammation of testicles or breasts, or of any part of the body; or a decoction may be made in wine with barley meal and dust of frankincense. They are dried as well before being parched.^b The test of their being properly boiled is if, after cooling, a touch seems to burn the tongue. If kept in an uncovered place wine lees very rapidly lose their power. Parching

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- adicit. utilissima¹ est ad conpescendos lichenas, furfures cum fico decocta. sic et lepris et ulceribus
 65 manantibus inponitur. fungorum naturae contraria est pota, sed magis cruda. oculorum medicamentis cocta et lota miscetur. medetur inlita et testibus et genitalibus. in vino autem adversus strangurias bibitur. cum expiravit quoque, lavandis corporibus et vestibus utilis. tunc usum acaciae habet.
- 66 XXXII. Faex aceti pro materia acrior sit necesse est multoque magis exulceret. resistit suppurationum incrementis, stomachum, interanea, ventrem inlita adiuvat. sistit rheumatismos earum partium et mulierum menses. panos discutit nondum exulceratos et anginas, ignes sacros cum cera.
- 67 mammas lactis sui inpatientes eadem extinguit, ungues scabros aufert. e serpentibus contra cerastas validissima cum polenta, cum melanthio autem contra crocodili morsus et canis. et haec cremata ampliat vires. tunc addito lentiscino oleo inlita una nocte rufat capillum. eadem ex aqua in linteolo adposita vulvas purgat.
- 68 XXXIII. Sapae faece ambusta sanantur, melius addita lanugine harundinis, eadem faece decocta potaque tusses veteres. decoquitur in patinis cum

¹ utilissima est cum E *Detlefsen* : utilissimae V *Mayhoff*, qui post adicit comma pro puncto posuit.

^a Some translate : "reduce breasts that are swollen with milk."

^b Cf. Dioscorides II. 179 RV (Wellmann): μελάνθιον· οἱ δὲ καὶ τοῦτο μήκωνα ἄγριον μέλανα καλοῦσιν. It was black cummin, git (*Nigella sativa*).

adds greatly to their potency. A decoction with fig is very efficacious for checking lichen and scaly eruptions. In this form they are applied also to leprous sores and running ulcers. Taken in drink they are an antidote to poisonous fungi, but a better one when crude. Boiled and rinsed they are used as an ingredient of eye salves. An application of them is healing to the testicles and genitals, but in wine they are taken for strangury. When too they have lost their strength, they are still useful for washing the person as well as clothes; for this purpose they take the place of gum arabic.

XXXII. Lees of vinegar, their substance being ^{(b) of} what it is, must be more acid and much more caustic. ^{vinegar.} They check the spreading of suppuration, and are beneficial if applied locally to the stomach, the intestines and the belly. They check fluxes of those parts and also menstruation. They disperse superficial abscesses not yet come to a head, quinsies and, applied with wax, erysipelas. These lees also dry up breasts that do not restrain their milk,^a and remove scabrous nails. With pearl barley they are a very powerful antidote to the poison of the snake called horned, and with melanthium ^b cure the bites of crocodiles and of dogs. These lees too increase their potency when parched. An application of them, so prepared, with the addition of mastic oil, turns the hair red in one night. Applied as a pessary with water on a linen cloth they act as a detergent to the uterus.

XXXIII. Lees of concentrated grape-juice cure burns, the better if the down of reeds be added, and to drink a decoction of the same cures chronic coughs. A decoction made in a saucepan, with salt

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sale et adipe ad tumorem quoque maxillarum et cervicium.

- 69 XXXIV. Olearum proxima auctoritas intellegitur. folia earum vehementissime adstringunt, purgant, sistunt. itaque commanducata inposita ulceribus medentur et capitis doloribus inlita cum oleo, decoctum eorum cum melle iis quae medici usserint, gingivarum inflammationibus et paronychiis sordidisque ulceribus et putrescentibus. cum melle sanguinis profluvium e nervosis partibus cohibet.
- 70 sucus eorum carbunculantibus circa oculos ulceribus et pusulis procidentique pupillae efficax, quapropter in collyria additur. nam et veteres lacrimationes sanat et genarum erosiones. exprimitur autem sucus tuis adfuso vino et aqua caelesti, siccatusque in pastillos digeritur. sistit menses in lana admotus vulvae, utilis et sanie manantibus, item condylomatis, ignibus sacris quaeque serpunt ulcera, epinyctidi.
- 71 XXXV. Eosdem effectus et flos earum habet. uruntur cauliculi exflorescentes, ut cinis spodi vicem praestet, vinoque infuso iterum uritur. suppurationes et panos inlinunt cinere eo vel foliis tuis cum melle, oculos vero cum polenta. sucus fruticis recentis accensi destillans sanat lichenas, furfures,
- 72 manantia ulcera. nam lacrima quae ex arbore ipsa destillat, Aethiopicae maxime oleae, mirari satis

^a All fibrous tissues are included under *nervi*.

^b See pp. 264-5, 384-5, and viii.

^c *Cadmia terra*, zinc ores from Cyprus, gave off when heated zinc-oxide vapour, which settled on the wall of the furnace and was then known as *spodium*.

^d The *nam* here means "but."

and fat, is used also for tumours of the jaws and of the neck.

XXXIV. Next in importance, as is generally *Olivea*. recognized, comes the olive. The leaves are, to a very high degree, astringent, detergent and binding. Accordingly sores are healed if these leaves are chewed and applied, headache by a liniment of leaves and oil, by a decoction with honey parts which physicians have cauterized, inflammation of the gums too, whitlows and foul, putrifying sores; with honey, the decoction checks bleeding from sinewy parts^a of the body. The juice of the leaves is good for carbuncular sores and pustules around the eyes, and for prolapse of the pupil, being therefore a common ingredient of salves, as it heals chronic streaming from the eyes and sores that have eaten into the eyelids. Now the juice is extracted by crushing the leaves with wine and rain water, after which the whole is dried and worked into lozenges. A woollen pessary made from it arrests excessive menstruation, and it is useful for sores running with sanies, as well as for condylomata, erysipelas, spreading sores and epinyctis.^b

XXXV. The flowers of the olive have the same properties. Stems are burnt that have blossoms on them, for the ash to serve as a substitute for spodium^c; wine is poured over this and it is again burned. Suppurations and superficial abscesses are treated by an application of this ash or of the leaves pounded with honey; for the eyes, however, pearl barley is added. The juice exuding from the wood, burnt while still green, heals lichen, eruptions of scurf, and running sores. As for^d the drops exuding from the tree itself, especially from the Ethiopian

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non est repertos qui dentium dolores inlinendos censerent venenum esse praedicantes, atque etiam in oleastro quaerendum. e radice oleae quam tenerrimae cortex derasus in mel crebro gustatu medetur sanguinem reicientibus et suppurata extussientibus. ipsius oleae cinis cum axungia tumores sanat extrahitque fistulis vitia et ipsas sanat.

- 73 XXXVI. Olivae albae stomacho utiliores, ventri minus. praeclarum habent usum antequam con-
diantur recentes per se cibi modo devoratae.
medentur enim harenosae urinae, item dentibus
carnem mandendo¹ adtrititis aut convolsis. nigra
oliva stomacho inutilior, ventri faciliior, capiti,
oculis non convenit. utraque ambustis prodest trita
et inlita. sed² nigra commanducatur, et protinus
ex ore inposita pusulas gigni prohibet. colym-
bades sordida ulcera purgant, inutiles difficultatibus
urinae.

- 74 XXXVII. De amurca poteramus videri satis
dixisse Catonem secuti, sed reddenda medicinae³
quoque est.⁴ gingivis et oris ulceribus, dentium
stabilitati efficacissime subvenit, item ignibus sacris
infusa et iis quae serpunt.⁵ pernionibus nigrae
olivae amurca utilior, item infantibus fovendis, albae
vero mulierum vulvae in lana admovetur. multo
autem omnis amurca decocta efficacior. coquitur

¹ carnem mandendo *Hard.*, *Detlefsen* : carne mandenda
T *Mayhoff* : carnem audenda aut carmen audebam *codd.*

² inlita. sed] inlita illa, sed *Mayhoff*.

³ medicinae] medicina dT.

⁴ est] ratio est *vulg.*

⁵ serpunt : serpent *Mayhoff*.

^a I.e. than dark olives.

^b See Book XV. §§ 33 ff.

olive, one cannot but be surprised that some have been found to recommend its use as an application for tooth-ache, while yet declaring that it is a poison, who even bid us procure it from the wild olive. The bark of olive root, taken from a tree as young as may be, scraped into honey and taken in frequent small doses, cures spitting of blood and purulent expectoration. The ash of the tree itself mixed with axle-grease cures tumours, withdraws morbid matter from fistulas and heals the fistulas themselves.

XXXVI. White olives are more useful ^a to the stomach, less so to the belly. Fresh and eaten by themselves as food before they are preserved, they are of excellent use, curing gravel and improving teeth that have been worn or loosened by chewing meat. The dark olive is less useful to the stomach, better for the belly, but of no use to the head and eyes. Both sorts, applied after pounding, are good for burns; the dark, however, is chewed up, and if applied at once from the mouth to the affected part prevents the formation of pustules. Olives preserved in brine cleanse foul ulcers, but are bad for strangury. *White olives.*

XXXVII. About lees of oil I might seem to have said enough,^b as I have followed Cato, but their medicinal value must be dealt with.^c They are excellent for the gums, for sores in the mouth, for strengthening loose teeth, and, poured over the part affected, for erysipelas and spreading sores. For chilblains lees from the dark olive are the more useful, as well as for the fomentation of babies; but those from the white olive are used for a wool pessary. All lees of oil, however, are more beneficial after being *Lees of oil.*

^c The omission of *ratio* is strange, and perhaps it should be restored as in the vulgate text.

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- in Cyprio vase ad crassitudinem mellis. usus eius cum aceto aut vino vetere aut mulso, ut quaeque causa exigat, in curationem oris, dentium, aurium, 75 ulcerum manantium, genitalium, rhagadam. vulneribus in linteolis inponitur, luxatis in lana. ingens hic usus utique inveterato medicamento, tale enim fistulas sanat. infunditur sedis, genitalium, vulvae exulcerationi, inlinitur vero podagris incipientibus, item articulariis morbis. si vero cum omphacio recoquatur ad mellis crassitudinem, causarios dentes extrahit, item iumentorum scabiem cum decocto lupinorum et chamaeleonte herba mire sanat. cruda amurca podagros foveri utilissimum.
- 76 XXXVIII. Oleastri foliorum eadem natura. spodium e cauliculis vehementius inhibet rheumatismos. sedat et inflammationes oculorum, purgat ulcera alienata¹ et explet, excrescentia leniter erodit siccaturque et ad cicatricem perducit. cetera ut in oleis, peculiare autem quod folia decocuntur ex melle et dantur coclearibus tribus² contra 77 sanguinis excreationes. oleum tantum³ acrius efficaciusque; ideo⁴ os quoque colluitur illo ad firmitatem dentium. inponuntur folia et paronychiis

¹ alienata et Vd *Mayhoff*: et omit. E *vulg.*, *Detlefsen*, qui comma post ulcera posuit.

² tribus add. *Val. Rose*.

³ tantum: num tamen cum *Harduino* vel autem?

⁴ ideo *Sillig*: et de eo cum tribus codd. *Detlefsen*, et ideo *Mayhoff*.

^a A spoonful (coclear) was the twenty-fourth part of a cyathus.

boiled down. This is done to the consistency of honey in a copper vessel. They are used, with vinegar, old wine, or honey wine, as the particular case requires, for the treatment of the mouth, teeth, ears, running sores, the genitals and chaps. To wounds they are applied on linen cloth, to sprains on wool. Used thus they are of great value, particularly when old, as a medicament, curing fistula. They are injected for ulceration of the anus, genitals, and uterus, but applied as liniment for incipient gout and diseases of the joints. If moreover they are reboiled with omphacium to the consistency of honey, they extract diseased teeth, and with a decoction of lupins and the plant chamaeleon are a wonderful healer of itch scab in beasts of burden. The crude lees are very beneficial as a fomentation for gout.

XXXVIII. Wild-olive leaves have the same *Wild olive.* qualities. Spodium from the young branches act as a powerful check on catarrhs, reduce inflammations of the eyes, cleanse sores that have eaten into the flesh and restore it, while they gently cauterize those that swell outwards, dry them up and promote cicatrization. In other respects the properties of wild and of cultivated olive are the same, except that the wild variety has this virtue of its own: a decoction of the leaves in honey is given in doses of three spoonfuls^a for spitting of blood. Only,^b wild-olive oil is sharper and more powerful, for which reason it is used to rinse the mouth in order to strengthen the teeth. The leaves

^a Professor R. A. B. Mynors has answered a query about this strange *tantum*. He quotes as a near parallel Virgil, *Eclogues* II. 3: *tantum inter densas umbrosa cacumina fagos*.

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et carbunculis et contra omnem collectionem cum vino, iis quae purganda sint cum melle. miscentur oculorum medicamentis et decoctum foliorum et sucus oleastri. utiliter et auribus instillatur cum
78 melle vel si pus effluat. flore oleastri condylomata inlinuntur et epinyctides, item cum farina hordeacia venter in rheumatismo, cum oleo capitis dolores. cutem in capite ab ossibus recedentem cauliculi decocti et cum melle inpositi conprimunt. ex oleastro maturi in cibo sumpti sistunt alvum, tosti autem et cum melle triti nomas repurgant, carbunculos rumpunt.

79 XXXIX. Olei naturam causasque abunde diximus. ad medicinam ex olei generibus haec pertinent, utilissimum esse omphacium, proxime viride, praeterea quam maxime recens—nisi cum vetustissimum quaeritur—, tenue, odoratum quodque non mordeat, e diverso quam in cibus eligitur. omphacium prodest gingivis. si contineatur in ore, colorem dentium custodit, mobiles stabilizat;¹ sudores cohibet.

80 XL. Oenanthino idem effectus qui rosaceo. omni autem oleo mollitur corpus, vigorem et robur accipit. stomacho contrarium auget² et ulcerum

¹ mobiles stabilizat, *ego*: magis quam stabilizat, *Io. Müller*: motusque stabilizat. *Mayhoff*: magis quam aliud *vulg.*: magis quam alibi *codd.*, *Dellefsen*. Diosc. I. 30 οὔλων σταλτικὸν καὶ ὀδόντων διακρατυντικὸν κρατούμενον ἐν τῷ στόματι ἰδρώτων τε ἐφεκτικόν.

² *An et delendum?*

^a See pp. viii, ix, and 264 note a.

^b Forcellini quotes examples of *causa* with the sense of *commodum, utilitas, emolumentum*, but does not refer to this passage.

^c See XV. §§ 4 ff.

^d See § 7 of this book.

^e This is very close to the passage in Dioscorides given in

with wine are applied to whitlows, to carbuncles, and to reduce any kind of gathering; with honey, however, to those that require cleansing. A decoction too of the leaves, with the juice of the wild olive, is used as an ingredient in remedies for the eyes. It is beneficial to inject it with honey into the ears, even though there is a discharge of pus. Flowers of the wild olive are applied to condylomata and to epinyctis,^a with barley meal to the belly for catarrhs, and with oil to the head for headache. When the skin on the head detaches itself from the bone, the young branches, boiled down and applied with honey, bring them together again. These branches, when fully grown, taken in food check looseness of the bowels, and when parched and beaten up with honey, they cleanse corroding sores and make carbuncles burst.

XXXIX. Of the nature and usefulness^b of olive oil I have already^c spoken at length. Here are the kinds that contribute to medicine: the most useful is omphacium, next comes green oil; moreover, it should be as fresh as possible (unless there is special need for the oldest oil), thin, with a pleasant odour and no pungent taste—in fact the reverse of what we look for when it is used in food. Omphacium^d is good for the gums. If it be retained in the mouth it keeps the teeth white and strengthens loose ones. It checks perspirations.^e *Olive oil.*

XL. Oil of oenanthe has the same qualities as rose oil, though all oil makes the body supple, giving it vigour and strength. It is injurious to the stomach *oil of oenanthe.*

the critical note, which fixes the meaning of *contineatur*, but leaves vague and uncertain the way in which oil was used to check excessive sweating.

PLINY : NATURAL HISTORY

- incrementa. fauces¹ exasperat et venena omnia hebetat, praecipue psimithi et gypsi, in aqua mulsa aut ficorum siccarum decocto potum contra meconium, ex aqua contra cantharidas, buprestim, salamandram, pityocampas, per se potum redditumque vomitionibus contra omnia supra dicta.
- 81 lassitudinum et perfrictionum refectio est. tormina calidum potum cyathis sex magisque ruta simul decocta pellit, item ventris animalia. solvit alvum heminae mensura cum vino et calida aqua potum aut tisanæ suco, vulnerariis emplastris utile faciem purgat. bubus infusum per nares, donec ructent,
- 82 inflationem sedat. vetus autem magis excalfacit corpora magisque discutit sudores, duritias magis diffundit, lethargicis auxiliare et inclinato morbo. oculorum claritati confert aliquid cum pari portione² mellis acapni. capitis doloribus remedium est, item ardoribus in febris cum aqua. si vetusti non sit occasio, decoquitur ut vetustatem repraesentet.
- 83 XLI. Oleum cicinum bibitur ad purgationes ventris cum pari caldae mensura. privatim dicitur purgare praecordia. prodest et articulorum morbis, duritiis omnibus, vulvis, auribus, ambustis, cum cinere vero muricum sedis inflammationibus, item psorae. colorem cutis commendat capillumque fertili natura evocat. semen ex quo fit nulla animans attingit.

¹ *Sententiam* fauces . . . dicta ita dist. *Mayhoff*.

² pari portione *vulg.*, *Sillig*, *Mayhoff*: portione *E Hard.*, *Ianus*, *Dellefsen*: parti partionem *V*.

^a Or, "takes away soreness from the throat." See note on § 97 and note c on § 143.

^b Of the possible meanings of *praecordia*, (1) the lower chest before the heart; (2) the part over the diaphragm; (3) the two hypochondria, the third is plainly required here.

and makes worse the spreading of sores. It makes the throat sore,^a and tends to neutralize all poisons, especially white lead and gypsum, if taken in hydromel or a decoction of dried figs for opium poisoning, in water for the poison of cantharides, buprestis, salamander and pine caterpillar, and by itself as an emetic to get rid of any of the poisons mentioned above. It is a restorative after fatigue and severe chills. Six cyathi drunk warm, especially if boiled with rue, cure gripings and drive out worms from the intestines. A hemina-dose drunk with wine and warm water, or with barley water, loosens the bowels; useful to make plasters for wounds, it removes spots from the face. Injected into the nostrils of oxen until they belch, it relieves flatulence. It is more warming, however, to the body if it be old oil, disperses better profuse sweats, reduces better indurations, being of help in cases of lethargus and also when the disease is on the decline. With an equal portion of honey taken from the hive without smoke, it is of some use for improving the vision. It is a remedy for headache and with water reduces high fever. If old oil cannot be obtained, new is boiled down to hasten the properties of age.

XLI. Castor oil is taken with an equal quantity of warm water to open the bowels. It is said to act especially upon the hypochondria.^b It is good also for diseases of the joints, for all indurations, for the uterus, the ears and burns; with the ashes moreover of the murex shell for inflammation of the anus, and likewise for the itch. It improves the complexion, and through its fertilizing power it promotes the growth of the hair. The seed from which it is made no living creature will touch. The wicks

Castor oil.

PLINY: NATURAL HISTORY

84 ellychnia ex uva¹ fiunt claritatis praecipuae, ex oleo lumen obscurum propter nimiam pinguitudinem. folia igni sacro inlinuntur ex aceto, per se autem recentia mammis et epiphoris, eadem decocta in vino inflammationibus cum polenta et² croco, per se autem triduo inposita faciem purgant.

85 XLII. Oleum amygdalinum purgat, mollit corpora, cutem erugat, nitorem commendat, varos cum melle tollit e facie. prodest et auribus cum rosaceo aut melle et mali punici tegmine³ decoctum, vermiculosque in his necat et gravitatem auditus discutit, sonos incertos et tinnitus, obiter capitis dolores et oculorum. medetur furunculis et a sole ustis cum cera. ulcera manantia et furfures cum vino expurgat, condylomata cum meliloto. per se vero capiti inlitum somnum adlicit.

86 XLIII. Oleum laurinum utilius quo recentius quoque viridius colore. vis eius excalfactoria, ideo paralyticis, spasticis, ischiadicis, suggillatis, capitis doloribus, inveteratis destillationibus, auribus in calyce punici calfactum inlinitur.

87 XLIV. Similis et myrtei olei ratio. adstringit, indurat, medetur gingivis, dentium dolori, dysinteriae, vulvae exulceratae, vesicis, ulceribus vetustis vel manantibus cum squama aeris et cera, item eruptionibus,

¹ uva codd., edd. : fortasse fibra vel aliquid simile.

² et vulg. ante Sillig : om. codd., Deilefsen, Mayhoff.

³ tegmine cum vet. Dal. Sillig, Mayhoff : germine cum codd. Deilefsen.

^a No meaning of *uva* suits this passage. Bostock and Riley say that "probably the seeds were beaten up into a pulp for this purpose." But *uva* cannot mean seeds, nor is it easy to make wicks from pulped seeds. The true reading is probably lost.

made from the fibres ^a give a brilliantly clear flame, but the oil burns with a dull light because it is much too thick. The leaves in vinegar are applied locally for erysipelas, but fresh leaves by themselves for diseases of the breasts and for eye-fluxes; a decoction of them in wine, with pearl barley and saffron, is used for inflammations, and applied by themselves for three days they clear the complexion.

XLII. Almond oil cleanses, makes the body supple, *Almond oil.* smoothes the skin, improves the complexion, and with honey removes spots on the face. A decoction also with rose oil or honey and pomegranate rind is good for the ears, kills the little worms in them, and clears away hardness of hearing, vague noises and singing, incidentally relieving headache and pains in the eyes. Combined with wax it cures boils and sunburn. With wine it cleans away running sores and scaly eruptions; with melilot, condylomata. Applied to the head moreover by itself it induces sleep.

XLIII. Laurel oil is the more useful the fresher *Laurel oil.* and greener it is. Its quality is heating, and therefore it is applied, warmed in pomegranate rind, for paralysis, convulsions, sciatica, bruises, headache, chronic catarrh and troubles of the ear.

XLIV. Similar also is the method ^b of using myrtle oil. It is astringent and hardens. With copper ^c scales and wax it cures sore gums, toothache, dysentery, ulcerations of the uterus, bladder troubles, chronic or running sores, and also eruptions and

^b Cf. XV. § 27 *eadem ratio et in sativa myrto*. Here *ratio* means "method of preparing," as the medicinal uses are not given in Book XV. But in Book XXIII., where the subject is use in medicine, *ratio* means "method of using."

^c *Squama aeris*: the black oxide of copper.

PLINY: NATURAL HISTORY

ambustionibus.¹ adtrita sanat et furfures, rhagadas, condylomata, articulos laxatos,² odorem gravem corporis. adversatur cantharidi, buprestis aliisque malis medicamentis quae exulcerando nocent.

- 88 XLV. Chamaemyrsinae sive oxymyrsinae eadem natura. cupressinum oleum eosdem effectus habet quos myrteum, item citreum. e nuce vero iuglande quod caryinum appellavimus alopeciiis utile est et tarditati aurium infusum, item capitis dolori inlitum, cetero iners et gravi sapore. enimvero si quid in nucleo putridi fuerit, totus modius deperit.
- 89 ex Cnidio grano factum eandem vim habet quam cicinum. e lentisco factum utilissimum acopo est, idemque proficeret et quod rosaceum, ni durius paulo intellexeretur. utuntur eo et contra nimios sudores papulasque sudorum. scabiem iumentorum efficacissime sanat. balaninum oleum repurgat varos, furunculos, lentigines, gingivas.

- 90 XLVI. Cypros qualis esset et quemadmodum ex ea fieret oleum docuimus. natura eius excalfacit, emollit nervos. folia stomacho inlinuntur et vulvae concitatae, succus quoque eorum adponitur. folia

¹ ambustionibus: *pro hoc ambustis in textu posuit sed adustionibus coni. Mayhoff.*

² laxatos T, cf. Dioscorides I. 39, ἀρθρα κεχαλασμένα: luxatos edd. et fere omnes codd.

^a *Laxare*, especially when it has reference to the human body or mind, has a not-unfavourable sense (*laxare suffocationes. ructus, intestina, curas, animum*; cf. XXIII. § 157 ad . . . *nervos laxandos . . . utile est.*). Pliny however perhaps thought that he could use *laxatos* of (over) loose joints, and a scribe changed it to the more usual word *luxatos*. If Pliny wrote the latter, under the mistaken opinion that it was the meaning of κεχαλασμένα, no scribe would know enough about Dioscorides to change it to *laxatos*.

^b Our "butcher's broom."

^c XV. § 28.

burns. It heals abrasions, scaly eruptions, chaps, condylomata, and relaxed ^a joints, removing also offensive odours of the body. It is an antidote to cantharides, the buprestis, and noxious poisons too that injure by causing sores.

XLV. Oil of dwarf myrtle or prickly myrtle ^b has the same qualities. Oil of cypress has the same effects as oil of myrtle and as oil of citrus. Oil of walnuts, which we have called ^c caryinum, is useful for mange, and is injected into the ears for hardness of hearing, and an application relieves headache; for the rest, it is sluggish and of a disagreeable taste; indeed, if there should be any rottenness in a kernel a whole peck is spoilt. The oil made from mezerium seed has the same property as castor oil. Oil of mastich is a very useful ingredient of acopum,^d and would be as profitable as rose oil were it not generally thought ^e to be rather too hard.^f They use it also for profuse sweating and for the pimples caused by sweats. It is a very efficient cure for the itch in beasts of burden. Oil of ben nut clears away spots, boils and freckles, and heals the gums.

XLVI. I have already described ^g the nature of the cyprus and the method of extracting oil from it. ^(b) *cypres*; Its properties are heating, and it softens the sinews. The leaves make an application for the stomach and for an irritated uterus^h; their juice too is made into

^a Greek ἀκοπον (fatigue-removing), an ointment.

^{*} Cf. XXIII. § 69 *olearum proxima auctoritas intellegitur*.

The Bohn editors say "styptic"—an excellent sense if *durus* can be active. As it is applied to vinegar and wine, it probably means "acid," though "thick" is possible.

^g See XII. § 109.

^h Some would omit the comma at *conciatae* or place it after *inlinuntur*, translating: "for the stomach, and make the juice into a pessary for an irritated uterus."

PLINY: NATURAL HISTORY

- recentia commanducata ulceribus in capite manantibus, item oris medentur et collectionibus, condylomatis. decoctum foliorum ambustis et luxatis
 91 prodest. ipsa rufant capillum tusa adiecto struthemali suco. flos capitis dolores sedat cum aceto inlitus, item combustus in cruda olla nomas sanat et putrescentia ulcera per se vel cum melle. odor floris oleique¹ somnum facit. adstringit gleucinum et refrigerat eadem ratione qua oenanthinum.
- 92 XLVII. Balsaminum longe pretiosissimum omnium, ut in unguentis diximus, contra omnes serpentes efficax, oculorum claritati plurimum confert, caliginem discutit, item dyspnoeas, collectiones omnes duritiasque lenit. sanguinem densari prohibet, ulcera purgat, auribus, capitis doloribus, tremulis, spasticis, ruptis perquam utile. adversatur aconito ex lacte potum, febres cum horrore venientes perunctis leviores facit. utendum tamen modico, quoniam adurit augetque vitia non servato temperamento.
- 93 XLVIII. Malobathri quoque naturam et genera exposuimus. urinam ciet, oculorum epiphoris in vino excoctum² utilissime inponitur, item frontibus

¹ oleique *Urlichs, Dellefsen, Mayhoff*: qui olet *Ianus*: olet qui *codd.*

² in vino excoctum *coll. Diosc. I. 12 ἀναξερθὲν ἐν οἴνῳ coni.* *Mayhoff*: in textu in vino expressum *Mayhoff*: vino expressum *plures codd., Dellefsen.*

^a The asyndeton gives support to those who would omit the *et* between *polenta* and *croco* in § 84.

^b Some think that Pliny has confused *στρούθειον μῆλον* (a kind of quince) with *στρούθειον* (soap wort).

^c For the method of preparing *gleucinum* see XV. § 29.

^d See XII. § 111.

a pessary. The fresh leaves are chewed and used as a remedy for running sores on the head, also for sores in the mouth, gatherings and ^a condylomata. A decoction of the leaves is good for burns and sprains. The leaves themselves, pounded and applied with the juice of the sparrow apple,^b turn the hair red. The blossom applied with vinegar soothes headache, and also, if burnt in a pot of unbaked clay and applied either alone or with honey, heals corroding sores and putrifying ulcers. The smell of the blossom and of the oil induces sleep. Oil of must ^c is astringent and cooling in the same way as oil of oenanthe.

XLVII. Oil of balsam is by far the most valuable ^{(c) balsam.} of all oils, as I have said ^d in my account of unguents. It is efficacious for all snake bites, improves very much clearness of vision, disperses films over the eyes, and also eases difficulty of breathing and all kinds of gatherings and indurations. It prevents thickening of the blood and cleanses sores, being very beneficial for ear troubles, headache, palsy, convulsions and ruptures. Taken in milk it is an antidote to aconite, and rubbing the body with it reduces fevers that are accompanied by shivering. It must, however, be used in moderation, since it burns the flesh and aggravates complaints if there be any excess.

XLVIII. The nature of malobathrum ^e also and ^{Malobathrum.} the various kinds of it, have been described.^f It is diuretic; boiled ^g in wine it makes a very useful application for fluxes of the eyes; applied to the

^a Indian cinnamon.

^f See XII. 129.

^g With Detlefsen's reading: "squeezed."

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dormire volentibus,¹ efficacius, si et nares inlinantur aut si ex aqua bibatur. oris et halitus suavitatem commendat linguae subditum folium, sicut et vestium odorem interpositum.

- 94 XLIX. Hyoscyaminum emolliendo utile est, nervis inutile. potum quidem cerebri motus facit. therminum e lupinis emollit, proximum rosaceo effectum. narcissinum dictum est cum suo flore. raphaninum phthiriasis longa valitudine contractas tollit scabriti-
- 95 asque cutis in facie emendat. sesaminum aurium dolores sanat et ulcera quae serpunt et quae cacoethe vocant. lilinum, quod et Syrium vocavimus, renibus utilissimum est sudoribusque evocandis, vulvae molliendae concoquendisque intus. Selgiticum nervis utile esse diximus, sicut herbacium quoque, quod Iguvini circa Flaminiam viam vendunt.
- 96 L. Elaeomeli, quod in Syria ex ipsis oleis manare diximus, sapore melleo, non sine nausea alvum solvit, bilem praecipue detrahit duobus cyathis in hemina aquae datis; qui bibere torpescunt excitanturque crebro. potiores certaturi praesumunt ex eo cyathum unum. pissino oleo usus ad tussim et quadripedum scabiem est.
- 97 LI. A vitibus oleisque proxima nobilitas palmis. inebriant recentes, capitis dolorem adferunt minus

¹ volentibus *codd. edd.* : volentium *coni. Mayhoff.*

^a *Nervus* here approximates in meaning to "nerve."

^b See XXI. § 129.

^c See XXI. § 127.

^d A city in Pisidia.

^e See XV. § 31.

^f See XV. § 32.

^g See Dioscorides I. 31: διεγείρειν δὲ αὐτοὺς μὴ ἐὼντας καταφέρεισθαι.

forehead it induces sleep, more effectively if the nostrils also be smeared with it, or if it be taken in water. A leaf placed under the tongue improves the sweetness of the mouth and breath, and similarly, if placed among clothes it imparts a pleasant smell.

.XLIX. Oil of henbane is useful as an emollient but injurious to the sinews ^a; indeed if drunk it causes derangement of the brain. Therminum, or oil of lupins, is emollient, being very similar in its effects to rose oil. Oil of narcissus was mentioned ^b along with the flower. Oil of radishes removes phthiriasis caused by chronic illness and smoothes roughness of the skin on the face. Oil of sesame cures ear-ache, spreading sores, and those called malignant. Oil of lilies, which I have also called ^c Syrian oil, is very useful for the kidneys, for promoting perspiration, for softening the uterus, and for bringing internal abscesses to a head. Oil of Selga ^d I have said ^e to be beneficial to the sinews, as is also the grass-green oil that the people of Iguvium sell along the Flaminian way.

L. Olive honey, which I have said ^f exudes in Syria from the olive trees themselves, has a taste like honey, relaxes the bowels, though not without nausea, and brings away bile in particular if two cyathi be given in a hemina of water. Those who have drunk it become torpid and need to be roused at short intervals.^g Those about to take part in drinking bouts take a cyathus of it beforehand. Oil of pitch is used for cough, and for itch in cattle.

LI. Next in honour to the vine and the olive comes the palm. Fresh dates are intoxicating, though causing headache less when dried, and they

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sicca, nec, quantum videtur, utiles stomacho. tussim exasperant, corpus alunt. sucum decoctarum antiqui pro hydromelite dabant aegris ad vires recreandas, sitim sedandam, in quo usu praeferabant Thebaicas, sanguinem quoque excreantibus utiles, in cibo maxime. inlinuntur caryotae stomacho, vesicae, ventri, intestinis cum cotoneis et cera et croco. suggillata emendant. nuclei palmarum cremati in fictili novo cinere loto spodi vicem efficiunt miscenturque collyriis et calliblephara faciunt addito nardo.

- 98 LII. Palma quae fert ¹ myrobalanum probatissima in Aegypto. ossa non habet reliquarum modo in balanis, alvum et menses sistit ² in vino austero et vulnera conglutinat.

- 99 LIII. Palma elate sive spathe medicinae confert germina, folia, corticem. folia inponuntur prae-

¹ fert *Deilefsen, Mayhoff, codd.*: refert *coni. Hard.* Cf. *Diosc. I. 109* παρεμφέρων τῇ Ἀραβικῇ μυροβάλανῳ.

² sistit *Hermolaus Barbarus ex Diosc.*: ciet *Deilefsen, Mayhoff, codd.* *Diosc. I. 109* πινόμενος σὺν οἴνῳ αὐστήρῳ <ποιεῖ add. *Wellmann*> πρὸς διάρροϊαν καὶ ροῦν γυναικείου· ἰσότησι δὲ καὶ αἰμορροΐδας καὶ τραύματα κολλᾷ καταπλασθεῖς.

^a The verb *exasperare* is here used in an unusual sense, "to take away the roughness" from a cough. This is shown by the parallel passage in *Dioscorides (I. 109 Wellmann)*: ἀρτηρίων τραχύτητας ἰῶνται.

^b With the reading *refert*: "The date resembling myrobalanum."

^c Or: "the Egyptian variety being most esteemed."

^d In chapters LII and LIII Pliny seems to have completely misunderstood and confused his authorities. *Dioscorides* says that the date is Egyptian, and resembles the Arabian myrobalanum. According to him the *spathe* is "the covering of the fruit of palms when these are at their prime (?):"

are not, so far as can be seen, beneficial to the stomach. They relieve ^a a cough and are flesh-forming food. The juice of boiled dates used to be given by the ancients to invalids instead of hydromel to restore their strength and to assuage thirst; for this purpose they used to prefer Thebaic dates, which are also useful, especially in food, for the spitting of blood. The dates called caryotae are applied with quinces, wax, and saffron to the stomach, bladder, belly and intestines. They heal bruises. The kernels of dates, if they are burnt in a new earthen vessel and the ashes washed, take the place of spodium, are an ingredient of eye-salves, and with the addition of nard make lotions for the eyebrows.

LII. The palm which bears ^b the myrobalanum, found in Egypt, is very highly esteemed.^c It has no stone in its dates, as other date-palms have. Taken in a dry wine it checks diarrhoea and excessive menstruation, and unites wounds.^d

LIII. The palm called elate or spathe gives to medicine its buds, leaves, and bark. Its leaves are

περικάλυμμά ἐστι τοῦ καρποῦ τῶν φοινίκων ἀκμὴν ἀνθούτων. Pliny on the other hand speaks of "the palm which bears the myrobalanum," giving it (or its fruit) the properties attributed by Dioscorides to the Egyptian date. He goes on to say that the *spathe* was a palm with medicinal properties in its sprigs, leaves and bark.

Among Pliny's mistakes seems to be the confusion of ben nut (myrobalanum) with what is called by Dioscorides φοινικοβάλανος. Cf. Pliny XII. § 103. The conjecture of Hardouin (*refert*) clears away one discrepancy between Dioscorides and Pliny if we take *palma* in the first sentence of § 98 to mean "date," but then the words *in balanis* become oddly otiose. No emendation, however, can make *spathe* in § 99 mean anything but a tree; it certainly cannot mean the περικάλυμμα τοῦ καρποῦ of Dioscorides.

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cordiis, stomacho, iocineri, ulceribus quae serpunt, cicatrici repugnantia. psoras cortex eius tener cum resina et cera sanat diebus xx. decoquitur et ad testium vitia. capillum denigrat, suffitu partus extrahit. datur bibendus renium vitiis et vesicae et praecordiorum, capiti et nervis inimicus. vulvae ac ventris fluctiones sistit decoctum eius, item cinis et tormina, potus in vino albo in vulvarum vitiis efficacissimus.

- 100 LIV. Proxima¹ varietates generum medicinarum² quae mala habent. ex his verna acerba stomacho inutilia sunt, alvum, vesicam circumagunt, nervos laedunt, cocta meliora. cotonea cocta suaviora, cruda tamen, dumtaxat matura, prosunt sanguinem excreantibus et³ dysintericis, cholericis, coeliacis. non idem possunt decocta, quoniam amittunt
- 101 constringentem illam vim suci et tamen decocuntur in aqua caelesti ad eadem quae supra scripta sunt, ad stomachi autem dolores cruda decoctave cerati modo inponuntur. inponuntur et pectori in febris ardoribus.⁴ lanugo eorum carbunculos sanat. cocta in vino et inlita cum cera alopeciis capillum red-

¹ proxima^e dE, *Dellefsen* : proxime V, *Mayhoff*.

² medicinarum quae *Sillig*, *Dellefsen* : medicinarumque Vd, *Mayhoff*.

³ et VdT, *Sillig*, *Mayhoff* : om. E, *Dellefsen*.

⁴ *Sententia* inponuntur et pectori . . . ardoribus post suci in codd. scripta est. Post scripta sunt posuit *Mayhoff*.

^a With *Mayhoff*'s reading : " Next come the various kinds of apples and their medicinal uses," a better sense, but the Latin is rather odd.

^b For these see *Celsus* IV. 19, § 1 with *Spencer*'s note. He suggests pyloric spasm and intestinal atony.

^c This sentence, which *Detlefsen* prints as a parenthesis, is plainly out of place as it stands in the manuscripts. *Mayhoff* says that his transposition was made "*coll. Diosc.*," but

applied to the hypochondria, stomach, liver, and to sores that spread and refuse to form a scar. The tender bark of it, mixed with resin and wax, heals the itch in twenty days. A decoction of it also is used for diseases of the testicles. It darkens the hair, and fumigation with it brings away the foetus. It is given in drink for diseases of the kidneys, bladder and hypochondria, though it is injurious to the head and sinews. A decoction of it arrests fluxes of the uterus and of the belly; the ashes also cure colic, and taken in white wine are very beneficial for affections of the uterus.

LIV. Next come the various kinds of medicines to be obtained from apples.^a Of these, spring apples are sour and injurious to the stomach, derange the bowels and bladder, and do harm to the sinews; cooked, however, they are less harmful. Quinces are more pleasant when cooked; though when raw, provided they are ripe, they are good for spitting of blood, dysentery, cholera and coeliac disease.^b They are not of the same efficacy when cooked, for they lose the astringent power that resides in their juice; nevertheless, a decoction in rain water is made for the purposes I have mentioned above. For stomach ache, moreover, they are applied, either raw or in a decoction, after the manner of a wax salve; also to the chest in attacks of high fever.^c The down on them heals carbuncles. Boiled in wine and applied with wax they restore the hair

Dioscorides seems to afford here little or no help. I have placed it one sentence later than does Mayhoff because, as it reads like an after-thought, Pliny may well have inserted it, on revising his manuscript, in the margin, to be read after *inponuntur*. The copier, perhaps offended by the repetition of this verb, inserted it earlier.

*Medicines
from (a)
apples;*

(b) quinces;

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- 102 dunt. quae ex his cruda in melle conduntur alvum movent. mellis autem suavitati multum adiciunt, stomachoque utilius id faciunt. quae vero in melle cocta conduntur quidam ad stomachi vitia trita cum rosae foliis decoctis dant pro cibo. sucus crudorum lienibus, orthopnoicis, hydropicis prodest item mammis, condylomatis, varicibus; flos et viridis et siccus inflammationibus oculorum, excrea-
- 103 tionibus sanguinis, mensibus mulierum. fit et sucus ex illis¹ mitis cum vino dulci tuis, utilis coeliacis et iocineri. decocto quoque eorum foveantur, si procidant, vulvae et interanea. fit et oleum ex iis quod melinum vocavimus, quotiens² non fuerint in umidis nata. ideo utilissima quae ex Sicilia veniunt, minus utilia struthia, quamvis cognata. radix eorum circumscripta terra manu sinistra capitur, ita ut qui id faciet dicat quare capiat et cuius causa. sic adalligata strumis medetur.
- 104 LV. Melimela et reliqua dulcia stomachum et ventrem solvunt, siticulosa, aestuosa, sed nervos non laedunt. orbiculata sistunt alvum et vomitiones, urinas cient. silvestria mala similia sunt vernis acerbis alvumque sistunt, sane in hunc usum inmaturatione opus sunt.

¹ ex illis *Sillig, Deilefsen, Mayhoff*: ex iliis, exilis, ex his *codd.*

² quotiens: *hoc loco lacunam posuit Mayhoff.*

^a This, not merely "sweet" (*dulcis*), seems to be the usual meaning of *suavis*, at any rate in Pliny. Cf. *suaviora* in § 100.

^b See XIII. § 11.

^c The lacuna that Mayhoff detects here he would fill up (from Dioscorides) thus: *quotiens astringi opus sit, usus magni, eliguntur parva et rotunda odorataque et quae.*

lost through mange. Raw quinces preserved in honey move the bowels. They add much to the pleasant taste ^a of honey, and make it more beneficial to the stomach. Boiled quinces preserved in honey and beaten up with a decoction of rose leaves are given by some as food for the treatment of affections of the stomach. The juice of raw quinces is good for the spleen, difficulty of breathing, and dropsy, as well as for the breasts, condylomata and varicose veins, and the flowers, both fresh and dried, for inflammations of the eyes, spitting of blood, and to regulate menstruation. A soothing juice is also derived from quinces by pounding them with sweet wine, which is good for coeliac affections and the liver. A decoction of them is also used to foment prolapsus of the uterus and of the intestines. An oil also is extracted from them, which I have called melinum,^b provided that ^c the fruit is not grown on wet soil. Hence the most useful are the quinces imported from Sicily; while the sparrow quince, although nearly related, is not so good. The root of the quince tree, after a ring has been drawn round it, is pulled up with the left hand, the person doing so being careful to state why he is pulling it, and for whom. An amulet from such a root cures scrofulous sores.

LIV. Honey apples ^d and the other sweet kinds ^{(c) other apples.} relax the stomach and bowels, cause thirst and heat, but do no injury to the sinews. Round ^e apples arrest looseness of the bowels and vomitings, and act as a diuretic. Wild apples are like sour spring apples and arrest looseness of the bowels; indeed for this purpose they must be used while unripe.

^d For *melimela* see XV. §§ 51, 59.

^e For *orbiculata* see XV. § 51.

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- 105 LVI. Citrea contra venenum in vino bibuntur vel ipsa vel semen. faciunt oris suavitatem, decocto eorum colluti aut suco expresso. horum semen edendum praecipiunt in malacia praegnatibus, ipsa vero contra infirmitatem stomachi, sed non nisi ex aceto facillime manduntur.
- 106 LVII. Punici mali novem genera nunc iterari supervacuum. ex his dulcia, quae apyrena alio nomine appellavimus, stomacho inutilia habentur, inflationes pariunt, dentes gingivasque laedunt, quae vero ab his sapore proxima vinosa diximus, parvum nucleum habentia, utiliora paulo intelleguntur. alvum sistunt et stomachum, dumtaxat pauca citraque¹ satietatem. et haec minime danda, quamquam omnino nulla, in febris, nec carne acinorum utili nec suco. caventur aequae vomitionibus ac bilem reicientibus.
- 107 uvam in his ac ne mustum quidem, sed protinus vinum aperuit natura, utrumque asperiore cortice. hic acerbis in magno usu. vulgus coria maxime perfici² illo novit; ob id malicorium appellant medici. urinam cieri eodem monstrant, mixtaque galla in aceto decoctum mobiles dentes stabilire. expetitur gravidarum

¹ citraque *codd.*, *Detlefsen* : ultraque *Mayhoff*, qui post satietatem *punctum om.*

² perfici *Mayhoff* : perficit *codd.*

^a This strange statement is very difficult to explain. *Citrea* (lime, lemon, citron) are acid, and the addition of vinegar would make them more so. Nothing is gained by giving *mando* its strict sense, to eat by chewing. Possibly Pliny was thinking of a variety with a sickly taste.

^b See XIII. § 112.

^c See the same section; ἀνύρητος means without a kernel, or with a soft one.

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LVI. Citrons, either the fruit or the pips, are taken in wine to counteract poisons. They make the breath pleasant if the mouth be washed with a decoction of them, or with the juice extracted from them. Their pips are prescribed to be eaten by women for the nausea of pregnancy, the fruit itself, moreover, is eaten for weakness of the stomach, but not very easily without vinegar.^a *Citrons.*

LVII. It would be waste of time to go over again ^b the nine varieties of pomegranates. The sweet ones, which I have also called ^c apyrena, are considered to be injurious to the stomach; they cause flatulence, and do harm to the teeth and gums. Those however which resemble these closely in taste, called by me ^d vinous pomegranates, have small pips and are understood to be a little more useful. They are astringent to the bowels and stomach, provided that moderation is observed and surfeit avoided. In fever even these are strictly forbidden, although no pomegranates at all ought really to be allowed, as neither pulp of the seeds nor the juice is anything but injurious. They are equally to be avoided when there is vomiting and bringing up of bile. In these nature has shown us a grape and, not mere must, but actually wine ready made. Both are enclosed in a rather rough skin, which in the case of the bitter ^e fruit is much used. It is popular knowledge that skins are thoroughly tanned by it; hence physicians call it the leather apple. They tell us that it is diuretic, and that a decoction in vinegar with the addition of gall-nut strengthens loose teeth. It is in request for easing *Pomegranates and medicines from them.*

^a See XIII. § 113.

^e Perhaps "acid."

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malaciae, quoniam gustatu moveat infantem. dividitur malum caelestique aqua madescit ternis fere diebus. haec bibitur frigida coeliacis et sanguinem excreantibus.

- 108 LVIII. Ex acerbo fit medicamentum quod stomatice vocatur, utilissimum oris vitiis, narium, aurium, oculorum caligini, pterygiis, genitalibus et iis quas nomas vocant et quae in ulceribus excrescunt, contra leporem marinum hoc modo: acinis detracto cortice tunsis sucoque decocto ad tertias cum croci et
 109 aluminis scissi, murrae, mellis Attici selibris. alii et hoc modo faciunt: punica acida multa tunduntur, sucus in cacabo novo coquitur mellis crassitudine ad virilitatis et sedis vitia et omnia quae lycio curantur, aures purulentas, epiphoras incipientes, rubras maculas in manibus. rami punicorum serpentes fugant. cortice punici ex vino cocti et inpositi perniones sanantur.¹ contusum malum ex tribus heminis vini decoctum ad heminam tormina et taenias pellit. punicum in olla nova, coperculo inlito, in furno exustum et contritum potumque in vino sistit alvum, discutit tormina.
- 110 LIX. Primus pomi huius partus florere incipientis cytinus vocatur a Graecis, mirae observationis multorum experimento. si quis unum ex his solutus

¹ cortice . . . sanantur *codd.*, *Detlefsen*: cortices . . . sanant *Io. Müller, Mayhoff*.

^a "Mouth medicine."

^b See p. x.

^c See IX. § 155.

^d *Ramnus infectorius*, or boxthorn.

^e *Observatio* seems here to be concrete, an "observed feature."

the nausea of women with child, since by a taste the foetus is quickened. The apple is divided and soaked in rain water for about three days. This infusion is drunk cold by sufferers from coeliac affections and spitting of blood.

LVIII. From the bitter pomegranate is made a medicine which is called stomatice,^a and is very good for affections of the mouth, nostrils and ears, for dimness of vision, for sores on the eyelid,^b for the genitals, for so-called corroding sores and excrescences on ulcers, and to counteract the poison of the sea-hare.^c This is the mode of preparation. After the rind has been taken off the berries are crushed; the juice is boiled down to one-third with saffron, split alum, myrrh and Attic honey, a half-pound of each. Others prepare it also in the following way. Many acid pomegranates are pounded, and the juice is boiled in a new pot to the consistency of honey, for the treatment of lesions of the male genitals and anus, of all lesions treated by lycium,^d of purulent ears, of incipient fluxes from the eyes, and of red spots upon the hands. Branches of the pomegranate keep away snakes. The rind of the fruit boiled in wine and applied is a cure for chilblains. A pomegranate, pounded and boiled down to one hemina in three heminae of wine, cures griping and acts as a vermifuge. A pomegranate in a new earthen jar with the lid sealed, burnt in a furnace, well pounded and taken in wine, checks looseness of the bowels and cures griping.

LIX. The first bud of this fruit when it is beginning *Cytinus* to blossom is called cytinus by the Greeks; it has a wonderful feature, which has come under the notice of many investigators.^e If a person, after

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- vinculo omni cinctus et calciatus atque etiam anuli decerpserit duobus digitis, pollice et quarto sinistrae manus, atque ita lustratis levi tactu oculis in os additum devoraverit, ne dente contingat, adfirmatur nullam oculorum inbecillitatem passurus eodem
- 111 anno. iidem cytini siccati tritique carnis excrescentes cohibent, gingivis et dentibus medentur, vel si mobiles sint, decocto suco. ipsa corpuscula trita ulceribus quae serpunt putrescuntve inlinuntur, item oculorum inflammationi intestinorumque et fere ad omnia quae cortices malorum. adversantur scorpionibus.
- 112 LX. Non est satis mirari curam diligentiamque priscorum qui omnia scrutati nihil intemptatum reliquerunt. in hoc ipso cytino flosculi sunt, antequam scilicet malum ipsum prodeat erumpentes, quos balaustium vocari diximus. hos quoque ergo experti invenere scorpionibus adversari. sistunt potu menses feminarum, sanat ulcera oris, tonsillas uvam, sanguinis excreationes, ventris et stomachi solutiones, genitalia, ulcera quacumque in parte
- 113 manantia. siccavere etiam, ut sic quoque experirentur, inveneruntque tusorum farina dysintericos a morte revocari, alvum sisti.¹ quin et nucleos ipsos acinorum experiri non piguit. tosti tusique stomachum iuvant cibo aut potionibus. per se

¹ sisti *vulg.*, *Dellefsen* : sistunt *codd.*, *Mayhoff*, qui ante alvum punctum posuit et sistendo coni.

freeing himself from every kind of band—girdle, shoes, even his ring—plucks one of these buds with two fingers, the thumb and the fourth finger, of his left hand, brushes his eyes with it, lightly touching them, and then swallows it without its touching any tooth, he will suffer, it is said, no eye-trouble during the same year. These same buds, dried and pounded, reduce fleshy excrescences, healing gums and teeth, even if they be loose, by the use of a decoction of the juice. The little buds, just as they are except for pounding, are applied to spreading, purulent sores, also to inflamed eyes and for inflammation of the intestines, and for nearly all the affections for which pomegranate rinds are used. They neutralize the stings of scorpions.

LX. It is impossible sufficiently to admire the pains and care of the old inquirers, who have explored everything and left nothing untried. In this very *cytinus* are little blossoms, unfolding of course before the pomegranate itself forms, which I have said ^a is called *balaustium*. So these blossoms too they investigated, and discovered them to neutralize the stings of scorpions. Taken in drink they arrest excessive menstruation, and heal sores of the mouth, tonsils and uvula, spitting of blood, looseness of the bowels and stomach, disorders of the genitals, and running sores in any part of the body. They dried too these blossoms, to test their efficacy also when thus prepared, and found that reduced to powder they cure sufferers from dysentery even when on the point of death, checking the diarrhoea. Moreover, they have taken the trouble to try out the very pips of the pomegranate berry. Roasted and pounded they are good for the stomach, if taken in food or

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bibuntur ex aqua caelesti ad sistendum alvum. radix decocta sucum remittit¹ qui taenias necat victoriati pondere. eadem discocta in aqua quas lycium praestat utilitates.

- 114 LXI. Est et silvestre punicum a similitudine appellatum. eius radices rubro cortice denarii pondere ex vino potae somnos faciunt. semine poto aqua quae subierit cutem siccatur. mali punici corticis fumo culices fugantur.
- 115 LXII. Pirorum omnium cibus etiam valentibus onerosus, aegris vini quoque modo negatur. decocta eadem mire salubria et grata, praecipue Crustumina. quaecumque vero cum melle decocta stomachum adiuvant. fiunt cataplasmata e piris ad discutienda corporum vitia, et decocto eorum ad duritias utuntur. ipsa adversantur boletis atque fungis, pelluntque
- 116 pondere et pugnante suco. pirum silvestre tardissime maturescit. conciditur suspensumque siccatur ad sistendam alvum, quod et decoctum eius potu praestat. decocuntur et folia cum pomo ad eosdem usus. pirorum ligni cinis contra fungos etiamnum efficacius proficit. mala piraque iumentis portatu mire gravia sunt vel pauca. remedio aiunt esse, si prius edenda dentur aliqua aut utique ostendantur.

¹ remittit *codd.*, *Mayhoff*: emittit *vulg.*, *Detlefsen*.

BOOK XXIII. LX. 113-LXII. 116

drink. They are taken by themselves in rain water to arrest looseness of the bowels. The root when boiled yields a juice which kills tape-worm, the dose being one victoriatum by weight. The same root, thoroughly boiled in water serves the same purposes as lycium.

LXI. There is also a wild pomegranate, so called *Wild pomegranates.* because of its likeness to the cultivated tree. Its roots, which have a red skin, act as a soporific if taken in wine, a denarius by weight being the dose. Its seed taken in drink dries up water under the skin.^a If pomegranate rind be burned the smoke keeps off gnats.

LXII. All kinds of pears are indigestible food, *Pears.* even for men in health; and to the sick they are as strictly forbidden as wine. Cooked, however, they are remarkably wholesome and pleasant, especially those of Crustumium. All kinds of pears, however, if boiled down with honey are wholesome to the stomach. Out of pears are made plasters for dispersing flesh lesions, and they use a decoction of them for indurations. By themselves they neutralize the poison of toadstools and tree-fungi, expelling it by their weight in addition to the counteracting effect of their juice. The wild pear is very slow in ripening. Sliced the pears are hung up and dried for checking looseness of the bowels, for which purpose a decoction also of them is efficacious, taken as drink. A decoction also of the leaves with the fruit is used for the same purposes. The ashes of pear wood are even more efficacious against the poison of tree-fungi. Apples and pears, even a small quantity, make a remarkably heavy load for beasts of burden. It is said that a remedy for this is to give them a few to eat, or at least to show some, before beginning the journey.

PLINY : NATURAL HISTORY

- 117 LXIII. Fici sucus lacteus aceti naturam habet, itaque coaguli modo lac contrahit. excipitur ante maturitatem pomi et in umbra siccatur ad aperienda ulcera, cienda menstrua adpositu cum luteo ovi aut potu cum amylo. podagris inlinitur cum farina Graeci feni et aceto. pilos quoque detrahit palpebrarumque scabiem emendat, item lichenas et
- 118 psoras, alvum solvit. lactis ficulni natura adversatur crabronum vesparumque et similium venenis, privatim scorpionum. idem cum axungia verrucas tollit. folia et quae non maturuere fici strumis inlinuntur omnibusque quae emollienda sint discutiendave. praestant hoc et per se folia. et alius usus eorum in
- 119 fricando lichene et alopeciis et quaecumque exulcerari opus sit. et adversus canis morsus ramorum teneri cauliculi cuti inponuntur. iidem cum melle ulceribus quae ceria vocantur inlinuntur. extrahunt infracta ossa cum papaveris silvestris foliis, canum rabiosorum morsus folio trito ex aceto restingunt. e nigra fico candidi cauliculi inlinuntur furunculis, muris aranei morsibus cum cera, cinis earum e foliis gangraenis consumendisque quae
- 120 excrescunt. fici maturae urinam cient, alvum solvunt, sudorem movent papulasque. ob id autumno insalubres, quoniam sudantia huius cibi opera corpora perfrigescunt. nec stomacho utiles sed¹ ad breve tempus et voci contrariae intelleguntur.

¹ sed *vulg.* : set *Mayhoff* : et *plures codd.*, *Dellefsen*.

^a This chapter has very close parallels to Dioscorides I. 128 (Wellmann).

^b See Celsus V. 28, 13.

^c Some take *cum cera* with both *membra* of this sentence.

LXIII.^a The milky juice of the fig has the nature of vinegar, and so like rennet it curdles milk. It is extracted before the fruit is ripe and dried in the shade for clearing up sores and promoting menstruation, the application being a pessary made with yoke of egg, or a draught with starch. With fenugreek meal and vinegar it makes a liniment for gout. It also serves as a depilatory, heals eruptions on the eye-lids, as well as lichen and itch. It loosens the bowels. Fig juice has the property of counteracting the poison of hornets, wasps and similar creatures, especially scorpions. With axle-grease it also removes warts. The leaves and unripe figs make a liniment for scrofulous sores and for all sores requiring the use of emollients or resolvents; the leaves by themselves too have the same property. They are used as well for rubbing lichen, mange, and on all occasions where a caustic is called for. The young shoots of the branches are applied to the skin to render dog-bites harmless. The same shoots with honey are applied to the sores called honey-comb.^b With leaves of wild poppy they extract fragments of bone. Their leaves beaten up with vinegar render harmless the bites of mad dogs. The tender white shoots of the dark fig are applied to boils, and with wax ^c to the bites of the shrew-mouse, and the ash from their leaves to gangrenes and to reduce excrescences. Ripe figs are diuretic, laxative, sudorific, and bring out pimples; for this reason they are unwholesome in autumn, since a body perspiring because figs have been eaten becomes very chilled. They upset the stomach, although only for a while, and they are understood to be bad for the voice. The last figs are more wholesome

*Figs and
their uses.*

PLINY : NATURAL HISTORY

novissimae salubriores quam primae, medicatae vero numquam. iuvenum vires augment, senibus meliorem valitudinem faciunt minusque rugarum. sitim sedant, calorem refrigerant, ob id non negandae in
 121 febribus constrictis quas stegnas vocant. siccae fici stomachum laedunt, gutturi et faucibus magnifice utiles. natura his excalfaciendi. sitim adferunt, alvum molliunt, rheumatismis eius et stomacho contrariae, vesicae semper utiles et anhelatoribus ac suspiriosis, item iocinerum, renium, lienum vitiis. corpus et vires adiuvant, ob id antea athletae hoc cibo pascebantur; Pythagoras exercitator primus
 122 ad carnes eos transtulit. recolligenti¹ se a longa valitudine utilissimae,² item comitialibus et hydro-picis; omnibusque quae maturanda aut discutienda sint inponuntur efficacius calce aut nitro aut iri³ admixto. coctae cum hysopo pectus purgant, pituitam, tussim veterem, cum vino autem sedem et tumores maxillarum. ad furunculos, panos, paroditas decoctae inlinuntur. utile et decocto fovere earum feminas.⁴ eodem quoque decocto⁵ cum feno Graeco utiles sunt et pleuriticis ac peripneu-

¹ recolligenti *Gronovius, Hard., Detlefsen*: recolligentes *codd., Mayhoff.*

² utilissimae *codd., Detlefsen*: utilissime *Mayhoff.*

³ iri *Ianus, Detlefsen, Mayhoff*: fi *codd.*: om. *vulg.*

⁴ earum feminas. *Detlefsen*: earum, feminasque *Mayhoff*: earum feminas quoque *codd.*

⁵ eodem quoque decocto *ego*: quoque decocto eodem *codd.*: eodem quoque decoctae *Detlefsen*: decocto eodem *Mayhoff*: decoctae quoque eadem *vulg.* *Alii aliter distinxerunt.*

* See XVI. § 118 *ficus sola ex omnium arborum fetu maturitatis causa medicatur.*

than the first; doctored^a figs, however, are never wholesome. Figs increase the strength of youth; to age they give improved health and fewer wrinkles. They relieve thirst and cool the heat of the body; for this reason they are not to be rejected in the constrictive fevers called *stegnae*.^b Dried figs are injurious to the stomach, but wonderfully beneficial to the throat and pharynx. The nature of these is heating, and they cause thirst. They relax the bowels, but are injurious to bowel catarrhs and to the stomach. On all occasions they are beneficial for the bladder, for difficult breathing and for asthma. Likewise for complaints of the liver, kidneys and spleen. They are flesh-forming and strengthening, and therefore the earlier athletes used them as a staple food. It was the trainer Pythagoras^c who was the first to change their diet of figs for one of meat. A convalescent after a long illness finds them very beneficial, as do sufferers from epilepsy and dropsy. They are applied to all gatherings that need bringing to a head or dispersing, more effectively if combined with lime, soda or iris. Boiled with hyssop they clear the chest of phlegm and chronic cough; boiled with wine they clear away trouble at the anus and swellings of the jaws. A decoction of them makes an ointment for boils, superficial abscesses and parotid swellings. This decoction makes a useful fomentation for female complaints, and the same decoction, combined with fenugreek, is useful in

^b This adjective ("constricted," "costive") was applied to fevers in which the pores of the body were closed. It was also used by Galen to describe *ea quae sensibiles excretionem prohibent* (Delphin editor).

^c Pythagoras of Samos, apparently, boxing victor at Olympia in Olympiad 48 (588 B.C.).

PLINY : NATURAL HISTORY

- 123 monicis. cum ruta coctae torminibus prosunt, tibi-
arum ulceribus cum aeris flore, et parotidi,
pterygiis cum punico malo, ambustis, pernionibus
cum cera, hydropicis coctae in vino cum absinthio et
farina hordeacia. nitro addito manducatae alvum
solvunt, scorpionum ictibus cum sale tritae inlinun-
tur, carbunculos extrahunt in vino coctae et inpositae.
carcinomati, si sine ulcere est,¹ quam pingui-
ssimam ficum inponi paene singulare remedium est, item
- 124 phagedaenae. cinis non ex alia arbore acrior purgat,
conglutinat, replet, adstringit. bibitur et ad dis-
cutiendum sanguinem concretum, item percussis,
praecipitatis, ruptis, convulsis cineris cyathus cum
cyathis² singulis aquae et olei. datur tetanicis et
spasticis, item potus vel infusus coeliacis et dysin-
tericis. et si quis eo cum oleo perungatur, exal-
facit. idem cum cera et rosaceo subactus ambustis
cicatricem tenuissimam obducit. lusciosos ex oleo
inlinitus emendat, dentiumque vitia crebro fricatu.
- 125 produnt etiam, si quis inclinata arbore supino ore
aliquem nodum eius morsu abstulerit nullo vidente
atque cum³ aluta inligatum licio e collo suspenderit,
strumas et parotidas discuti. cortex tritus cum
oleo ventris ulcera⁴ sanat. crudi⁵ grossi verrucas,

¹ est *codd.* : sit *Mayhoff*.

² cyathus cum cyathis *Ianus* : cyathus in *Mayhoff* : *lacunam*
pro cyathis *indic. Sillig, Deilefsen* : nervis pro cyathis *Io.*
Müller.

³ cum *dfE Deilefsen, Mayhoff* : eum *VT* : in *vulg.*

⁴ ulcera *vulg.*, *Mayhoff* : vulnera *plures codd., Deilefsen.*

⁵ crudi *Deilefsen* : erudi *d* : cruda *V* : crudae *vulg., May-*
hoff : *om. E.*

^a Cf. Cicero *de lege agraria* III. ii. 4 *ne refricare obductam*
iam reipublicae cicatricem videret.

pleurisy and pneumonia. Boiled with rue figs are good for colic; with red copper oxide for sores on the shins and for parotid swellings; with pomegranate for hangnails; with wax for burns and chilblains; for dropsy they are boiled in wine with wormwood and barley meal. If they are chewed with soda added they relax the bowels; beaten up with salt they make a liniment for scorpion stings. Boiled in wine and applied they bring carbuncles to a head. In cases of carcinoma, if there be no ulceration, it is almost specific to apply the richest fig possible, and the same is true of corroding ulcers. The ash from no other wood is more active as a cleanser, healer of wounds, former of new flesh, and as an astringent. It is also taken in drink to disperse blood that has coagulated, and likewise for bruises, violent falls, ruptures, and cramps, the dose being a cyathus to a cyathus of oil and water respectively. It is given to sufferers from tetanus and convulsions: in drink also or in an injection for coeliac trouble and for dysentery. With oil it makes an ointment which has warming properties. Kneaded into a paste with wax and rose oil it forms over burns the slightest of scars.^a Made into a paste with oil it cures short sight, and ailments of the teeth if used frequently as a dentifrice. It is said that, if anyone with upturned face draws a fig tree down, and a knot of it be bitten off without anybody seeing, to tie this round the neck by a string with a bag of fine leather and wear it as an amulet disperses scrofulous sores and parotid swellings. The crushed bark with oil heals ulcerations of the belly. Raw green ^b figs with soda and

^a *Grossi*, in Greek *δλυσθαι*, were late figs that never ripened. The word is both masculine and feminine.

PLINY : NATURAL HISTORY

thymos nitro, farina additis tollunt. spodi vicem exhibet fruticum a radice exeuntium cinis. bis lotus¹ adiecto psimithio digeritur in pastillos ad ulcera oculorum et scabritiam.

- 126 LXIV. Caprificus etiamnum multo efficacior fico; surculo quoque eius lacte coagulatur in caseum.² lactis minus habet;³ exceptum id coactumque in duritiam suavitatem carnibus adfert fricatu. dilutum⁴ ex aceto miscetur exulceratoriis medicamentis, alvum solvit, vulvam cum amylo aperit, menses ciet cum luteo ovi. podagricis cum farina Graeci feni inlinitur. lepras, psoras, lichenas, lentigines expurgat, item venenatorum ictus et canis morsus.
- 127 dentium quoque dolori hic sucus adpositus in lana prodest aut in cava eorum additus. cauliculi et folia admixto ervo contra marinorum venena prosunt. adicitur et vinum. bubulas carnes additi caules magno ligni compendio percoquunt. grossi inlita strumas et omnem collectionem emolliunt et discutunt, aliquatenus et folia. quae mollissima sunt ex his cum aceto ulcera manantia, epinyctidas,
- 128 furfures sanant. cum melle foliis ceria sanantur et

¹ lotus *Ianus* (coll. § 97), *Detlefsen*, *Mayhoff*: coctus *plurimi codd.*: tostus *vulg.*

² caseum *Detlefsen veterem edit. secutus*: caseo *codd.*

³ *In codd.* lactis minus habet *post fico*: *transtulit Mayhoff.*

⁴ adfert fricatu. dilutum *Mayhoff*: adfert. fricatur diluto *ex codd.*

^a Dioscorides has (I. 128 § 5): ὁμοὶ δὲ μυρμηκίας καὶ θύμους ὄν νίτρω καὶ ἀλεύρω καταπλασθέντες αἵρουσι. Θύμοι were so called because they resembled the flowers of thyme

^b For *spodium* see note on § 71.

meal added remove warts and warty excrescences.^a The ash of the bushy shoots from the root is a substitute for zinc oxide.^b After two washings, with white lead added it is worked into lozenges for the treatment of ulcers and scabs on the eyes.

LXIV. The wild fig is even much more efficacious *Wild fig.* than the fig; a sprig of it also curdles milk into cheese.^c It has less milk in it than the cultivated fig. This milk is collected and hardened by pressure, when it is rubbed on meat to keep it sweet. Diluted with vinegar it forms an ingredient of blistering preparations. It relaxes the bowels; with starch it opens the uterus; with the yolk of egg it promotes menstruation. With fenugreek meal it is applied to gouty limbs. It clears up leprous sores, itch, lichen and freckles, and similarly cures wounds made by venomous creatures and dog bites. Applied on wool this juice is also good for toothache, or hollow teeth may be plugged. The tender stalks and leaves mixed with vetches are a remedy for the poison of marine animals; wine also is added. Beef can be boiled soft with a great saving of fuel if the stalks be added to the water. An application of the unripe figs soften and disperse scrofulous sores and every kind of gathering; to a certain degree the leaves too do the same. The softest leaves with vinegar heal running sores, epinyctis^d and scurfy eruptions. With honey the leaves cure honey-comb sores^e and

^a Whatever the correct reading in this passage, this seems to be the meaning of it. Mayhoff's transposition is almost certainly right, but *in caseo* can scarcely stand, unless "in cheese making" be a possible rendering.

^d For epinyctis see XX. § 44 and pp. viii-ix.

^e See § 119 note.

PLINY : NATURAL HISTORY

- canis morsus recentes, cum vino phagedaenae. cum papaveris foliis ossa extrahunt. grossi caprifici inflationes¹ discutiunt suffitu—resistunt et sanguini taurino pota et psimithio et lacti coagulato potae—item in aqua decoctae atque inlitae parotidas. cauliculi aut grossi eius quam minutissimae ad
- 129 scorpionum ictus e vino bibuntur. lac quoque instillatur plagae et folia inponuntur, item adversus murem araneum. cauliculorum cinis uvam faucium sedat, arboris ipsius cinis ex melle rhagadia, radix defervefacta in vino dentium dolores. hiberna caprificus in aceto cocta et trita inpetigines tollit. inlinuntur ramenta e ramo sine cortice quam
- 130 minutissima ad scobis modum. caprifico quoque medicinae unius miraculum additur, corticem eius intumescensem² puer impubis si defracto ramo detrahat dentibus, medullam ipsam adalligatam ante solis ortum prohibere strumas. caprificus tauros quamlibet feroces collo eorum circumdata in tantum mirabili natura conpescit ut immobiles praestet.
- 131 LXV. Herbam quoque Graeci erinon³ vocant reddendam in hoc loco propter gentilitatem. palmum alta est, cauliculis quinis fere, ocimi simili-

¹ inflationes *plures codd.*, *Deilefsen* : inflammationes *E, Mayhoff*.

² intumescensem *e con.* *Hard.*, *Sillig*, *Deilefsen*, *Mayhoff* : inpubescentum *codd.*

³ erinon *Mayhoff ex Diosc. IV. 141 [RV] (Wellmann)* : erineon *Hermolaus Barbarus, plures edd.*, *Deilefsen*.

^a *I.e.* the smoke was inhaled.

^b That is, as well as the cultivated fig. See for this § 125.

fresh dog bites, with wine corroding sores, and with poppy leaves they extract splinters of bone. Wild figs when green disperse flatulence by fumigation^a—taken in drink they are an antidote to bulls' blood that has been swallowed, to white lead and to curdled milk—and boiled down in water they disperse when used as a liniment sores of the parotid glands. The young stalks or green fruit of the wild fig, plucked when as small as possible, are taken in wine to counteract scorpion stings. The milk, too, is poured into a wound and the leaves are applied to it, and the same treatment is employed for the bite of the shrew-mouse. The ash of the young shoots soothes a sore uvula; the ash of the tree itself applied in honey cures chaps, and the root boiled down in wine cures toothache. The winter wild fig, boiled in vinegar and beaten up, clears up eczema. The branches with the bark removed are scraped to produce particles as fine as sawdust, which are used as an application. The wild fig too^b has one miraculous medicinal property attributed to it; if a boy not yet adolescent break off a branch and tears off with his teeth its bark swollen with sap, the mere pith tied on as an amulet before sunrise keeps away, it is said, scrofulous sores. The wild fig, if a branch be put round the neck of a bull, however fierce, by its miraculous nature so subdues the animal as to make him incapable of movement.

LXV. A plant too, called erinos by the Greeks, *Erinos*. must be described here because of the kinship^c of its name. It is a span high, and generally has five small stalks; it resembles basil, with a white flower

^a That is, to the name of the wild fig (*ἐπιρεύς*, *ἐπιρός*, wild fig-tree, and *ἐπιρύς*, a kind of basil).

PLINY : NATURAL HISTORY

tudine, flos candidus, semen nigrum, parvum. tritum cum Attico melle oculorum epiphoris medetur, II drachmis cum cyathis Attici III. decerpta manat lacte multo dulci herba,¹ perquam utili² aurium dolori nitri exiguo addito. folia resistunt venenis.

- 132 LXVI. Pruni folia in vino decocta³ tonsillis, gingivis, uvae prosunt⁴ subinde colluto ore. ipsa pruna alvum molliunt, stomacho non utilissima, sed brevi momento.

LXVII. Utiliora persica sucusque eorum, etiam in vino aut in aceto, expressus. neque⁵ alius eis pomis innocentior cibus. nusquam minus odoris, suci plus, qui tamen sitim stimulet.⁶ folia eius trita inlita haemorrhagian sistunt. nuclei persicorum cum oleo et aceto capitis doloribus inlinuntur.

¹ II drachmis cum cyathis Attici III. decerpta manat lacte multo dulci herba *ex Diosc. IV. 141 (Wellmann)* conicio : cum cyathis . . . decerpto ramo manat lacte multo dulci, herba *Deilefsen* : suci instillatio—decerpta enim manat lacte multo dulci herba—*Mayhoff* : ut cum ciati ut E, cum ut lati *plures codd.*, deceptarum E, decreptarum V, decerptarum d : *alii alia con. edd.*

² utili conicio : utilis *codd. et edd.*

³ in vino decocta *ego transposui*; vide notam 4: decocta *codd.*: decocta . . . in vino decocta et vehementius *ex Gargilio Mayhoff*.

⁴ Post prosunt *codd.* in vino decocta (-tae VE) et.

⁵ neque *Urlichs, Deilefsen, Mayhoff* : qui (interrog.) *Sillig* : nec est *vulg.* : que *codd.*

⁶ Post stimulet lacunam indicat *Mayhoff*, qui intercidisse nonnulla de perseae arboris natura aliena (inde eius) putat.

^a The text at the end of this chapter is very conjectural. *Mayhoff* solved many of the difficulties, but not all. The odd readings of the MSS. seem to be corruptions due to misunderstandings of II and III, which were in the original text, if that

and small black seed. Pounded and added to Attic honey this seed cures fluxes of the eyes, the proportions being two cyathi to four drachmae of Attic honey. When broken this plant distils much sweet milk, which with the addition of a little soda is very beneficial for ear-ache.^a The leaves are an antidote to poisons.

LXVI. The leaves of the plum boiled in wine are *Plums*. good for tonsils, gums and uvula, the mouth being rinsed with this decoction occasionally.^b The fruit by itself relaxes the bowels, but is not very good for the stomach, though its effects are transitory.

LXVII. Peaches are more wholesome, and so is *Peaches*. their juice, which is also squeezed out and taken in wine or vinegar. No other food is more harmless than this fruit; nowhere do we find less smell or more juice, though the latter tends to create thirst. Peach leaves pounded and applied arrest haemorrhage. Peach kernels mixed with oil and vinegar make an application good for headache.

came from Dioscorides. See IV. 141 (Wellman): τούτου ὁ καρπὸς δραχμῶν δυεῖν πλήθος μυγίς πρὸς μέλιτος πλήθος δραχμῶν τεσσάρων ἐγχυρίομενος ρεύματα ὀφθαλμῶν ἰσθαι. ὁ δὲ χυλὸς αὐτὸς πόνον παύει μετὰ θείου ἀπύρου καὶ νίτρου ἐνσταζόμενος.

^b Dioscorides I. 121: τὸ δὲ ἀφέψημα τῶν φύλλων ἐν οἴνῳ σκευαζόμενον καὶ ἀναγαργαριζόμενον κιονίδα καὶ οὖλα καὶ παρίσθια ρευματιζόμενα στέλλει (of the κοκκυμηλέα). This supports my reading as against Mayhoff's, founded on Gargilius, but the parallel is not very close. Gargilius has (ex oleribus et pomis XLVI de pruno p. 192 Rose): *aqua in qua pruni folia decocta sunt gingivas et uiam itemque tonsillas ab omni querela ore conluendo defendit, sed in vino decocta vehementius prosunt*. I prefer my reading to Mayhoff's on two grounds: (1) it is closer to the words of Dioscorides; (2) *vehementius* is more likely to have been added by Gargilius than omitted by a scribe.

PLINY : NATURAL HISTORY

133 LXVIII. Silvestrium quidem prunorum bacae, vel e radice cortex, in vino austero si decoquantur ita ut triens ex hemina supersit, alvum sistunt et tormina. satis est singulos cyathos decocti sumi.

LXIX. Et in his et sativis prunis est limus arborum quem Graeci lichena appellant, rhagadis et condylomatis mire utilis.

134 LXX. Mora in Aegypto et Cypro sui generis, ut diximus, largo suco abundant summo cortice desquamato, altior plaga sicca est mirabili natura. sucus adversatur venenis serpentium, prodest dysintericis, discutit panos omnesque collectiones, vulnera conglutinat, capitis dolores sedat, item aurium. splenicis bibitur atque inlinitur et contra
135 perfrictiones. celerrime teredinem sentit. neque apud nos suco minor usus. adversatur aconito et araneis in vino potus. alvum solvit, pituitas taeniasque et similia ventris animalia extrahit. hoc idem praestat et cortex tritus. folia tingunt capillum cum fici nigrae et vitis corticibus¹ simul coctis aqua caelesti. pomi ipsius sucus alvum solvit protinus. ipsa poma ad praesens stomacho utilia refrigerant, sitim faciunt. si non superveniat alius cibus, intumescunt. ex in maturis sucus sistit alvum, veluti animalis alicuius in hac arbore observandis miraculis quae in natura eius diximus.

¹ corticibus dE *vulg.*, *Detlefsen* : corticeve *Mayhoff*.

^a Book XIII. §§ 56 ff.

^b See XVI. § 182.

^c See XVI. § 102.

LXVIII. As for wild plums, their fruit or the skin *Wild plums.* of their root, boiled down in dry wine from one hemina to one third, checks looseness of the bowels and colic. A cyathus of the decoction at a time makes a sufficient dose.

LXIX. Both on wild and on cultivated plum trees there forms a gummy substance called lichen by the Greeks and wonderfully beneficial for chaps and condylomata.

LXX. In Egypt and in Cyprus are mulberries of a *Mulberries and their uses.* unique sort, as I have already said.^a If the outer rind be peeled off they stream with copious juice; a deeper cut (so wonderful is their nature) finds them dry.^b The juice counteracts the poison of snakes, is good for dysentery, disperses superficial abscesses and all kinds of gatherings, heals wounds, and allays headache and ear-ache. For diseases of the spleen it is taken by the mouth and used as a liniment, as also for violent chills. It very quickly breeds worms. We Romans use the juice quite as much. Taken in wine it neutralizes aconite and the poison of spiders; it opens the bowels, expelling phlegm, tapeworm and similar intestinal parasites. The same effect also is produced by the pounded bark. The leaves boiled in rain water together with the bark of the dark fig and of the vine dye the hair. The juice of the fruit itself moves the bowels immediately; the fruit itself is for the time being good for the stomach, being cooling, though thirst-producing, and if no other food is taken afterwards, it swells up. The juice of unripe mulberries is constipating; there are marvels to be noticed about this tree, mentioned by me in my description^c of it, which suggest that it has some sort of soul.

PLINY : NATURAL HISTORY

- 136 LXXI. Fit ex pomo panchrestos stomatice, eadem arteriace appellata, hoc modo: sextarii tres suci ex pomo leni vapore ad crassitudinem mellis rediguntur. post additur omphacii aridi pondus xii aut murræ xi, croci xi. hæc simul trita miscentur decocto, neque est aliud oris, arteriae, uvæ, stomachi iucundius remedium. fit et alio modo: suci sextarii duo, mellis Attici sextarius decoquantur ut supra diximus.
- 137 Mira sunt præterea quæ produntur: germinatione priusquam folia exeant, sinistra decerpi futura poma. ricinos¹ Graeci vocant. hi terram si non attingere, sanguinem sistunt adalligati, sive ex vulnere fluat sive ore sive naribus sive hæmorrhoidis.
- 138 ad hoc servantur repositi. idem præstare et ramus dicitur luna plena defractus incipiens fructum habere, si terram non attingerit, privatim mulieribus adalligatus lacerto contra abundantiam mensum. hoc et quocumque tempore ab ipsis decerptum ita ut terram non attingat adalligatumque existimant præstare. folia mori trita aut arida decocta serpentium ictibus inponuntur aliquidque² potu proficitur. scorpionibus adversatur

¹ ricinos *codd.*: cytinus *coni.* Hermolaus Barbarus.

² aliquidque *Dellefsen*: æque *Mayhoff*: alique aut alii *codd.*

^a I.e. *στοματική*, a medicine for the mouth.

^b This word is almost certainly a mistake, probably Pliny's, as the MSS. show no variant. *Ricinus* is not a Greek word, but a Latin one, meaning either (1) a tick or (2) the castor-oil plant (also *cici* or *croton*). The conjecture of Hermolaus Barbarus, *cytinus*, is what ought to have been written. Cf. §§ 111, 112 and XIII. 113, where *cytinus* is the calyx of the pomegranate.

BOOK XXIII. LXXI. 136-138

LXXI. There is made from the mulberry a mouth-^{*A mulberry mouth-wash.*} wash^a called panchrestos, or arteriace, in the following way. Three sextarii of the juice from the fruit are reduced by a gentle heat to the consistency of honey; then are added two denarii of dried omphacium, or one of myrrh, and one denarius of saffron. These are beaten up together and mixed with the decoction. There is no other remedy more pleasant for the mouth, the trachea, the uvula or the gullet. It is also prepared in another way. Two sextarii of the juice and one sextarius of Attic honey are boiled down in the manner I have described above. .

There are besides marvels related of the mulberry. When it begins to bud, but before the leaves unfold, the fruit-to-be is plucked with the left hand. The Greeks call them ricini.^b These, if they have not touched the ground, when worn as an amulet stay a flow of blood, whether it flows from a wound, the mouth, the nostrils, or from haemorrhoids. For this purpose they are stored away and kept. The same effect is said to be produced if there be broken off at a full moon a branch beginning to bear; it must not touch the ground, and is specially useful when tied on the upper arm of a woman to prevent excessive menstruation. It is thought that the same result is obtained if the woman herself breaks off a branch at any time, provided that it does not touch the ground before it is used as an amulet. Mulberry leaves pounded, or a decoction of dried leaves, are used as an application for snake bite, and it is of some^c benefit to take them in drink. The

^c Or, with the reading of Mayhoff, "equally beneficial."

PLINY : NATURAL HISTORY

- e radice corticis sucus ex vino aut posca potus.
 139 reddenda est et antiquorum compositio. sucum
 expressum pomi maturi immaturique mixtum
 coquebant vase aereo ad mellis crassitudinem.
 aliqui murra adiecta et cupresso praeduratum ad
 solem torrebant permiscentes spatha ter die. haec
 erat stomatice qua et vulnera ad cicatricem per-
 ducebant. alia ratio: sucum¹ siccato exprimebant
 pomo multum saporis opsoniorum conferentem, in
 medicina vero contra nomas et pectoris pituitas et
 ubicumque opus esset adstringi viscera. dentes
 140 quoque conluebant eo. tertium genus suci foliis et
 radice decoctis ad ambusta ex oleo inlinenda.
 inponuntur et folia per se. radix per messes incisa
 sucum dat aptissimum dentium dolori collectioni-
 busque et suppurationibus, alvum purgat. folia
 mori in urina madefacta pilum coriis detrahunt.
 141 LXXII. Cerasia alvum molliunt, stomacho inutilia,
 eadem siccata alvum sistunt, urinam cient. invenio
 apud auctores, si quis matutino roscida cum suis
 nucleis devoret, in tantum levare alvum ut pedes
 morbo liberentur.

LXXIII. Mespila exceptis setaniis, quae malo pro-
 priorem vim habent, reliqua adstringunt stomachum

¹ alia ratio. sucum E, *Dellefsen* : alia ratio suci Vd *Sillig*,
Mayhoff.

^a Literally, "the juice of the skin from the root."

^b See above § 136 and note a.

^c See XV. § 84 *setaniae maius pomum candidiusque, acini
 molliore ligno.*

juice extracted from the skin of the root,^a and drunk in wine or diluted vinegar, counteracts the poison of scorpions. There must also be given a recipe of the ancients. The juice of the ripe fruit was mixed with that of the unripe, and the two boiled in a copper vessel to the consistency of honey. Some used to add myrrh and cypress and then to bake the mixture very hard in the sun, stirring it three times a day with a spatula. This was their stomatice,^b which they also used to help the formation of a scar on wounds. Another method was to squeeze the juice from dried fruit; this greatly improved the flavour of viands, and was moreover used in medicine for corroding sores, phlegm on the chest, and whenever astringent treatment of the bowels was called for. It was also used to rinse the teeth. A third kind of juice is to make a decoction of the leaves and root, to be applied in oil to burns. The leaves are also applied by themselves. An incision into the root at the time of harvest yields a juice admirably suited to relieve toothache, gatherings and suppurations, besides acting as a purge. Mulberry leaves soaked in urine remove hair from hides.

LXXII. Cherries relax the bowels, but are *Cherries.* injurious to the stomach; dried cherries arrest looseness of the bowels and are diuretic. I find it stated in my authorities that if anyone swallows cherries with their stones in the morning, when the dew is on them, the bowels are so relieved that the feet are freed from gout.

LXXIII. Medlars, except the setanian,^c which is *Medlars.* nearer to the apple in its properties, act astringently upon the stomach and check looseness of the bowels.

PLINY : NATURAL HISTORY

sistuntque alvum. item sorba sicca, nam recentia stomacho et alvo citae prosunt.

- 142 LXXIV. Nuces pineae quae resinam habent contusae leviter, additis in singulas singulis¹ sextariis aquae ad dimidium decoctae, sanguinis excreationi medentur ita ut cyathi bini bibantur ex eo. corticis e pinu in vino decoctum contra tormina datur. nuclei nucis pineae sitim sedant et acrimoniam stomachi rosionesque et contrarios umores consistentes ibi, et infirmitatem virium roborant, renibus,
143 vesicae utiles. fauces videntur exasperare et tussim;² bilem pellunt poti ex aqua aut vino aut passo aut balanorum decocto. miscetur his contra vehementiores stomachi rosiones cucumeris semen et sucus porcilacae, item ad vesicae ulcera et renes,³ quoniam et urinam cient.

- 144 LXXV. Amygdalae amarae radicum decoctum cutem in facie corrigit coloremque hilariorem facit. nuces ipsae somnum faciunt et aviditatem,⁴ urinam et menses cient. capitis dolori inlinuntur maximeque in feбри; si ab ebrietate, in aceto et rosaceo et aquae sextario. sanguinem sistunt cum amylo et menta, lethargicis et comitialibus prosunt capite peruncto, epinyctidas sanant e vino vetere, ulcera putrescentia, canum morsus cum melle, et furfures

¹ singulas singulis *Sillig*: singulas *Hard.*: singulis *codd.*

² et tussim *E, Mayhoff*: tussim et *Detlefsen post Urlichs*: et tussi *Vd.*

³ renes *Mayhoff cum pluribus codd.*: renis *Sillig, Detlefsen*: renium *d.*

⁴ aviditatem: ariditatem *coni. Fröhner.*

^a This use of *ita ut* seems akin to the restrictive use illustrated by Roby (II.) § 1650 ("provided that").

^b This apparently is the meaning of *acrimonia stomachi*, acidity of the stomach.

Likewise sorb apples when dried ; but when fresh they are beneficial to the stomach and to disordered bowels.

LXXIV. Pine nuts, containing resin, if lightly crushed and boiled down to one half with a sextarius of water to each nut, cure spitting of blood when the decoction is taken ^a in doses of two cyathi. A decoction of the bark of the pine in wine is prescribed for colic. The kernels of the pine nut allay thirst, heart-burn,^b gnawings of the stomach and the peccant humours that settle there ; they tone up the system, and are beneficial for the kidneys and bladder. They seem to relieve roughness ^c of the throat or of a cough, and drive out bile when taken in water, wine, raisin wine or a decoction of dates.^d For severe gnawing pains of the stomach they are combined with cucumber seed and juice of purslane, and also for ulcerations of the bladder and affections of the kidneys, since they are also diuretic.

LXXV. A decoction of roots of the bitter almond clears the complexion of spots and makes it of a more cheerful colour. Almonds themselves induce sleep and increase the appetite ; they are diuretic and act as an emmenagogue. They are applied for headache, especially in fever ; if the headache arises from wine, the application is with vinegar, rose oil and a sextarius of water. With starch and mint they arrest hæmorrhage, and to anoint the head with the mixture is good for lethargus and epilepsy ; mixed with old wine they heal epinyctis and purulent sores, with honey dog bites and, after preliminary fomentation, scaly

^a Such seems to be the meaning of *exasperare*, as also in §§ 80, 97, although the usual meaning of this verb is the exact opposite.

^d Or, ben-nuts.

PLINY : NATURAL HISTORY

- ex facie ante fotu praeparata, item iocineris et renium dolores ex aqua potae, et saepe et¹ ecligmate cum resina terebinthina. calculosis et difficili urinae in passo et ad purgandam cutem in aqua mulsa tritae sunt efficaces. prosunt ecligmate² iocineri, tussi et colo cum elelisphaco modice addito. in melle³ sumitur nucis abellanae magnitudo. aiunt quinis fere praesumptis ebrietatem non sentire potores, vulpesque, si ederint eas nec contingat e vicino aquam lambere, mori. minus valent in remediis dulces, et hae tamen purgant, urinam cient. recentes stomachum implent.
- 146 LXXVI. Nucibus Graecis cum absinthii semine ex aceto sumptis morbus regius sanari dicitur, isdem inlitis per se vitia sedis et privatim condylomata, item tussis, sanguinis reiectio.
- 147 LXXVII. Nuces iuglandes Graeci a capitis gravitudine appellavere. etenim arborum ipsarum foliorumque virus in cerebrum penetrat. hoc minore tormento sed⁴ in cibis nuclei faciunt. sunt autem recentes iucundiores, siccae unguinosiores et stomacho inutiles, difficiles concoctu, capitis dolorem

¹ et saepe et *plures codd.* : et saepe ex E, *Detlefsen* : set saepe et *Mayhoff*.

² *Inter ecligmate et iocineri add. ex Diosc.* cum lacte *Mayhoff*.

³ in melle E, *Detlefsen* : et melle VdT : e melle ; *Mayhoff*, qui punctum post addito delet.

⁴ sed *codd.*, *Mayhoff* : et *Hard.*, *Detlefsen*.

^a Elelisphacus was sage. The text of Mayhoff would give : "in an electuary with milk are beneficial for the liver, a cough, and colic, if a little elelisphacus be added in honey; the dose is a piece the size of a filbert," i.e. the electuary should be of this size.

^b "Greek nuts" were Greek almonds, mentioned by Celsus IV. 10, and Pliny XVI. § 138.

eruptions on the face. Taken in water, too, they remove pains of the liver and kidneys, and they are often made also into an electuary for this purpose with resin from the turpentine tree. For stone and strangury they are beneficial taken in raisin wine, and for clearing the skin taken crushed in hydromel. In an electuary they are good for the liver, for a cough and for colic, if a little elelisphacus^a be added. The electuary is taken in honey, and is of the size of a filbert. It is said that if about five of these almonds are taken before a carouse drinkers do not become intoxicated, and that foxes die if they eat them without having water at hand to lap. Less efficacious as a remedy are sweet almonds, yet these also are purging and diuretic. Eaten fresh they lie heavy on the stomach.

LXXVI. Greek nuts^b taken in vinegar with wormwood seed are said to cure jaundice, applied by themselves affections of the anus, condylomata in particular, as well as coughs and spitting of blood.

LXXVII. Walnuts have received their name^c in *Walnuts*. Greek from the heaviness of the head which they cause; the trees themselves, in fact, and their leaves give out a poison that penetrates to the brain. The kernels if they are eaten^d have the same effect, though the pain is less severe. Freshly gathered, however, they are more agreeable. The dried nuts are more oily, and injurious to the stomach, difficult of digestion, productive of headache and bad for a

^c The word *κάρυον* (nut, especially walnut) is here supposed to be derived from *κάρος*, torpor.

^d With *sed* the thought is: "but they must be eaten, not merely smelt, as the leaves are;" with *et*: "even when eaten they bring on heaviness."

PLINY : NATURAL HISTORY

- inferentes, tussientibus inimicae, vomituris ieiunis aptae, tenesmo, colo,¹ trahunt enim pituitam. eadem praesumptae venena habetant, item ad-
 148 santur cepis leniuntque earum saporem. aurium inflammationi inponuntur, cum mellis exiguo et ruta mammis et luxatis, anginae cum ruta et oleo,² cum cepa autem et sale et melle canis hominisque morsui. putamine nucis iuglandis dens cavus inuritur. putamen combustum tritumque in oleo aut vino infantium capite peruncto nutrit capillum, et eo ³ ad ⁴ alopecias sic utuntur. quo plures nuces quis ederit hoc facilius taenias pellit. quae per- veteres sunt nuces gangraenis et carbunculis medentur, item suggillatis, cortex iuglandium lichenum vitio et dysintericis, folia trita cum aceto
 149 aurium dolori. in sanctuariis Mithridatis maximi regis devicti Cn. Pompeius invenit in peculiari commentario ipsius manu compositionem antidoti e duabus nucibus siccis, item ficis totidem et rutae foliis xx simul tritis, addito salis grano; ei quo hoc ieiunus sumat nullum venenum nociturum illo die. contra rabiosi quoque canis morsum hi nuclei a ieiuno homine commanducati inlitique praesenti remedio esse dicuntur.

¹ colo *Ianus, Dellefsen* : solo *codd.* : aptae in tenesmo solo *Mayhoff*.

² anginam cum ruta et oleo *in codd.* post item : *trans. Mayhoff, qui et anginae coni.*

³ et eo *codd.* : ideo *Mayhoff*.

⁴ ad *vulg.* : om. *codd.*

▪ *Pituita* like the Greek *φλέγμα* seems to mean mucus, or excess of it. It is hard to make sense of the reading of the MSS. (*solo*), though it is retained by *Mayhoff*.

cough; they are good, however, for those who intend to vomit fasting, for tenesmus and for colic, as they bring away phlegm.^a Taken in time these nuts deaden the effects of poisons, neutralize onions and make their flavour milder. They are applied to inflammation of the ears, with rue and a little honey to the breasts and to sprains, with rue and oil to quinsy, and with onion, salt and honey to the bites of dogs and of humans. By a walnut shell a hollow tooth is cauterized.^b If the shell be burnt and beaten up with the addition of oil or wine, to anoint a baby's head with the mixture is to promote the growth of hair, and this preparation is also used for mange. The more walnuts eaten, the easier it is to expel tape-worms. Very old walnuts are a cure for gangrenes and carbuncles, as also for bruises; the bark ^c of walnuts cures lichen and dysentery, and the pounded leaves with vinegar cure ear-ache. When the mighty king Mithridates had been overcome, Cn. Pompeius found in a private note-book in his cabinet a prescription for an antidote written in the king's own hand-writing:—two dried walnuts, two figs and twenty leaves of rue were to be pounded together with the addition of a pinch of salt; he who took this fasting would be immune to all poison for that day. The kernels of walnuts chewed by a fasting person and applied to the bite of a mad dog are said to be a sovereign remedy.

^b Commentators including Fée wonder how this could be done. Perhaps walnut juice was supposed to have caustic properties, or *inurit* may have replaced a word meaning to scrape (with the hardened shell).

^c Fée says the bark of the tree and not the shell of the nut. This view seems probable, for the use of the leaves follows immediately.

PLINY : NATURAL HISTORY

- 150 LXXVIII. Nuces abellanae capitis dolorem faciunt et inflationem stomachi, corpori¹ etiam pinguitudinis² conferunt plus quam sit³ verisimile.⁴ tostae et destillationi medentur, tussi quoque veteri tritae in aqua mulsa potae. quidam adiciunt grana piperis, alii e passo bibunt. pistacia eosdem usus habent quos nuclei pinei praeterque ad serpentium ictus, sive edantur sive bibantur. castaneae vehementer sistunt stomachi et ventris fluctiones, alvum cient, sanguinem excreantibus prosunt, carnes alunt.
- 151 LXXIX. Siliquae recentes stomacho inutiles alvum solvunt. eaedem siccatae sistunt stomachoque utiliores fiunt, urinam cient. Syriacas in dolore stomachi ternas in aquae sextariis decoquunt quidam ad dimidium eumque sucum bibunt. sudor virgae corni arboris lamna candente ferrea exceptus non contingente ligno inlitaque inde ferrugo incipientes lichenas sanat. arbutus sive unedo fructum fert difficilem concoctioni et stomacho inutilem.
- 152 LXXX. Laurus excalfactoriam naturam habet et foliis et cortice et bacis; itaque⁵ decoctum ex his, maxime foliis,⁶ prodesse volvis et vesicis convenit.

¹ corpori *codd.* : corporis *Detlefsen.*

² pinguitudinis *Mayhoff* : pinguitudini *codd.*, *Detlefsen.*

³ sit dT, *Mayhoff* : sunt V : om. E, *Detlefsen.*

⁴ Hic add. set *Mayhoff* : es V : est *Urlichs, Detlefsen* : om. E.

⁵ itaque *vulg.* *Mayhoff* : itemque *codd.*, *Sillig, Detlefsen.*
Diosc. (I. 78, Wellmann) : ὅθεν τὸ ἀφέλημα αὐτῶν εἰς ἐγκαθίσματα ταῖς περὶ κύστιν καὶ μήτραν ἀμύλλει διαθέσει.

⁶ maxime foliis E *Sillig, Detlefsen* : maximeque foliis *Mayhoff* : maxime foliisque Vd. Fortasse excidit e cortice ante foliisque.

* It is difficult to reconcile *sistunt stomachi et ventris fluctiones* and *alvum cient*. Perhaps the former refers to violent diarrhoea and the latter to healthy action of the bowels.

LXXVIII. Filberts cause headache and flatulence *Filberts.* of the stomach, and put more fat on the body than one would think at all likely. Parched they also cure catarrh, pounded too and taken in hydromel they cure chronic cough; some add grains of pepper, others take them in raisin wine. Pistachio nuts have the same uses as pine nuts, and are besides, whether eaten or taken in drink, beneficial for snake bites. Chestnuts check effectually fluxes of the stomach and belly; they encourage peristaltic action of the bowels,^a arrest hæmoptysis, and increase the growth of flesh.

LXXIX. Fresh carobs, injurious to the stomach, *Carobs.* relax the bowels; dried carobs are astringent and prove more beneficial to the stomach; they are diuretic. For pain in the stomach some persons boil down to one half three Syrian carobs in a sextarius of water, and drink this decoction. The sap that sweats from a branch of the cornel tree is caught on a red-hot iron plate without the wood touching it; the resulting rust is applied as a cure for incipient lichen. The arbutus or strawberry tree bears a fruit that is difficult of digestion and injurious to the stomach.

LXXX. The bay—leaves, bark and berries—is *Bay and its uses.* of a heating nature; and so a decoction made from these, especially from the leaves, as is generally agreed,^b is good for the uterus and bladder. An

^b Both meanings of *convenit* (*constat* and *debet*) are to be found in Pliny. Either makes good sense in this passage: "as is generally agreed," "as is fitting." The ἀπόζει of Dioscorides represents the *prodesse* of Pliny, and is no support for the sense *debet* here. In fact this passage by itself is proof that Pliny had before him a Greek text similar to, but not identical with, that of Dioscorides; there is nothing in Pliny corresponding to ἐγκαθάρτα (*sitz bath*), and nothing in Dioscorides corresponding to *maxime foliis*.

PLINY : NATURAL HISTORY

- inlita vero vesparum crabronumque et apium, item serpentium venenis resistunt, maxime sepos, dipsadis et viperae. prosunt et mensibus feminarum cum oleo cocta, cum polenta autem quae tenera sunt trita ad inflammationes oculorum, cum ruta testium, cum rosaceo capitis dolores, aut cum irino. quin et commanducata atque devorata per triduum terna liberant tussi, eadem suspiriis trita cum melle.
- 153 cortex radice cavendus gravidis. ipsa radix calculos rumpit, iocineri prodest tribus obolis in vino odorato potu.¹ folia potu vomitiones movent. bacae menses trahunt adpositae tritae vel potae. tussim veterem et orthopnoean sanant binae detracto cortice in vino potae, si et febris sit, ex aqua aut ecligmate ex passo aut aqua mulsa decoctae.
- 154 prosunt et phthisicis eodem modo et omnibus thoracis rheumatismis. nam et concoquunt pituitam et extrahunt. adversus scorpiones quaternae ex vino bibuntur, epinyctidas ex oleo inlita et lentigines et ulcera manantia et ulcera oris et furfures, cutis porriginem sucus bacarum emendat et phthiriasim. aurium dolori aut gravitati instillatur cum vino vetere et rosaceo. perunctos eo

¹ potu *codd.* Deilefsen : pota *vulg.*, Mayhoff.

^a A serpent whose bite caused putrefaction, Greek σήψ (σήπω).

^b A serpent whose bite caused great thirst (Greek δαψάς, from δαψώ).

^c *Vinum odoratum* is the οἶνος εὐώδης of Dioscorides, wine with a strong and pleasant bouquet.

^d Coction (in Greek πέψις) was the name applied to the

application of the leaves, moreover, counteracts the poison of wasps, hornets and bees, as well as that of snakes, in particular of the seps,^a the dipsas^b and the viper. Boiled with oil the leaves are also good for menstruation; tender leaves pounded and mixed with pearl barley are good for inflammations of the eyes, with rue for those of the testicles, and with rose oil or iris oil for headache. Moreover three leaves, chewed and swallowed for three days in succession, free from cough; the same pounded and with honey free from asthma. The skin of the root is to be avoided by women with child. The root itself breaks up stone in the bladder, and three oboli taken in a draught of fragrant^c wine are good for the liver. The leaves taken in drink act as an emetic. The berries pounded and applied in a pessary or taken in drink act as an emmenagogue. Doses of two berries with the skin removed taken in wine cure chronic cough and difficulty of breathing. If fever also be present, the berries are given in water, or in a raisin-wine electuary, or boiled down in hydromel. Prepared in the same way they are good for phthisis and for all fluxes of the chest, for they both produce coction^d of the phlegm and bring it up. For scorpion stings doses of four berries are taken in wine. Applied in oil the berries clear up epin-
 yctis,^e freckles, running sores, sores in the mouth, and scaly eruptions; the juice of the berries clear scurf from the skin and phthiriasis; for pain or dullness of the ears it is injected with old wine and process by which any peccant humour became "mature" and harmless as a disease progressed to its close. A typical example is the drying up of catarrh in the common cold. See the Loeb *Hippocrates* I. li. and lii.

* Cf. p. 499, note *d*.

PLINY : NATURAL HISTORY

- 155 fugiunt venenata omnia. prodest contra ictus et potus, maxime autem eius¹ laurus quae tenuissima habet folia. bacae cum vino serpentibus et scorpionibus et araneis resistunt. ex oleo at aceto inlinuntur et lieni, iocineri, gangraenis cum melle. et in fatigatione etiam aut perfrictione suco eo
- 156 perungui nitro adiecto prodest. sunt qui celeritati partus conferre multum putent radicem acetabuli mensura in aqua potam, efficacius recentem quam aridam. quidam adversus scorpionum ictus decem bacas dari iubent potu,² item et in remedio uvae iacentis quadrantem pondo bacarum foliorumve decoqui in aquae sextariis tribus ad tertias, eam calidam gargarizare et in capitis dolore inpari numero bacas cum oleo conterere et calfacere.
- 157 laurus Delphicae folia trita olfactaque subinde pestilentiae contagia prohibent, tanto magis si et urantur. oleum ex Delphica ad cerata acopumque, ad perfrictiones discutiendas, nervos laxandos, lateris dolores, febres frigidas utile est, item ad aurium dolorem in mali punici cortice tepefactum. folia decocta ad tertias partes aquae uvam cohibent gargarizatione, potu alvi dolores intestinorumque, tenerrima ex his trita in vino papulas pruritusque

¹ eius *vulg.*, *Dellefsen* : valet *Mayhoff* : et aut ea *codd.*

² potu *V*, *Dellefsen* : potui *dE vulg.* *Mayhoff*, qui item et in *remedium coll. XXV. 145 con.*

^a Forcellini says that *resistere* is used "*de medicamentis, quae morbos propellunt, nec sinunt accedere.*" It is a favourite word with Pliny. Whether the sentence under consideration

rose oil. Those anointed with it are shunned by all venomous animals; taken in drink also it is beneficial for wounds inflicted by them, especially the juice from the bay with very small leaves. The berries with wine are a prophylactic^a against serpents, scorpions and spiders; with oil and vinegar they are applied also to the spleen and liver, with honey to gangrene. Further, when there is severe fatigue or chill, anointing with the juice of this berry, to which soda has been added, is beneficial. Some think that delivery is much hastened by taking in water an acetabulum by measure of bay root, fresh root being more efficacious than dried. Several authorities prescribe that ten berries be given in drink for scorpion stings; to cure relaxed uvula that a quarter of a pound of berries or leaves be boiled down to one-third in three sextarii of water, the decoction to be used as a warm gargle; and that to take away headache an uneven number of berries be pounded with oil and warmed. The pounded leaves of the Delphic bay, if smelt occasionally, keep off infection of plague, and the effect is greater if they are also burnt. Oil from the Delphic bay is useful for making wax salves and anodynes, for shaking off chills, for relaxing the sinews, and for the treatment of pain in the side and of the shivers of fever; warmed in the rind of a pomegranate it is also used for ear-ache. The leaves boiled down in water to one-third, and used as a gargle, brace the uvula; taken by the mouth the decoction relieves pains in the bowels and intestines; the most tender leaves, pounded and applied in wine

means that venomous creatures are kept off, or that their poisons are rendered harmless, is uncertain. The former seems the more likely.

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- 158 inlita noctibus. proxime valent cetera laurus genera. laurus Alexandrina sive Idaea partus celeres facit radice pota trium denariorum pondere in vini dulcis cyathis tribus, secundas etiam pellit mensesque. eodem modo pota daphnoïdes sive his nominibus quae diximus silvestris laurus prodest, alvum solvit vel recenti folio vel arido, drachmis tribus cum sale in hydromelite. manducata pituitas extrahit, folium et vomitus, stomacho inutile. sic et bacae quinae denae purgationis causa sumuntur.
- 159 LXXXI. Myrtus sativa candida minus utilis medicinae quam nigra. semen eius medetur sanguinem excreantibus, item contra fungos in vino potum. odorem oris commendat vel pridie commanducatum; ita¹ apud Menandrum Synaristosae hoc edunt. datur et dysintericis idem denarii pondere in vino. ulcera difficilia in extremitatibus
- 160 corporis sanat cum vino subfervefactum. inponitur lippitudini cum polenta et cardiacis in mamma sinistra, et contra scorpionis ictum in mero, et ad vesicae vitia, capitis dolores, aegilopas, antequam suppurent, item tumoribus, exemptisque nucleis in vino vetere tritum eruptionibus pituitae. sucus seminis alvum sistit, urinam ciet. ad eruptiones

¹ ita Mayhoff: item codd.: om. Dellefsen.

^a See XV. 132. I am uncertain whether to translate *laurus* by "laurel" or "bay."

^b That *semen* means "berries," here is shown by *sucus seminis* in § 160. The reference is to the berries of the "white" myrtle.

^c "Women having Lunch together," a comedy of Menander.

^d Here probably an affection of the heart. See, however,

at night, remove pimples and itching. The other varieties of bay have very nearly the same properties. That of Alexandria, or Mt. Ida, taken in doses of three denarii of the root to three cyathi of sweet wine, hastens delivery; it also brings away the afterbirth and acts as an emmenagogue. Taken in drink in the same way, the wild bay, called daphnoïdes, or by the names already ^a given to it, is beneficial; three drachmae of the leaves, fresh or dried, taken with salt in hydromel, relax the bowels. Chewed, this bay brings up phlegm and the leaves bring up vomit, being injurious to the stomach. In this way, too, the berries, fifteen at a time, are taken as a purge.

LXXXI. The white cultivated myrtle is less useful ^{White myrtle.} in medicine than the dark. Its berries ^b cure haemoptysis, and are taken in wine to counteract poisonous tree-fungi. Even when chewed the day previously they make the mouth smell sweet, and so in Menander the women in *Synaristosae* ^c eat them. A denarius of the same by weight is given in wine for dysentery. Made lukewarm they heal with wine obstinate sores on the extremities of the body. With pearl barley they are applied to the eyes for ophthalmia and to the left breast for cardiac ^d disease. In neat wine they are applied to wounds inflicted by scorpions, and for affections of the bladder, headache, lacrimal fistulas before suppuration, and tumours; for pituitous eruptions the kernels are first taken out and then the berries are crushed in old wine. The juice of the berries settles the bowels and is diuretic. For eruptions of pimples and for those of phlegm an ointment is made of the

p. 442 note *d* and Spencer on Celsus III. 19, § 1; vol. I. p. 302 (note).

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- pusularum pituitaeque cum cerato inlinitur, et
 161 contra phalangia. capillum denigrat. lenius suco
 oleum est ex eadem myrto, lenius et vinum, quo
 numquam inebriantur. inveteratum sistit alvum et
 stomachum, tormina sanat, fastidium abigit. foliorum
 arentium farina sudores cohibet inspersa vel in
 febris, utilis et coeliacis, procidentiae vulvarum, sedis
 vitiis, ulceribus manantibus, igni sacro fotu, capillis
 fluentibus, furfuribus, item aliis eruptionibus,
 162 ambustis. additur in medicamenta quae liparas
 vocant eadem de causa qua oleum ex his efficacis-
 simum ad ea quae in umore sunt, tamquam in ore et
 vulva. folia ipsa fungis adversantur trita ex vino,
 cum cera vero articulariis morbis et collectionibus.
 eadem in vino decocta dysintericis et hydropicis
 potui dantur. siccantur in farinam quae inspergitur
 163 ulceribus aut haemorrhagiae. purgant et lentigines,
 pterygia et paronychia et epinyctidas, condylomata,
 testes, tetra ulcera, item ambusta cum cerato. ad
 aures purulentas et foliis crematis utuntur et suco et
 decocto. comburuntur et in antidota, item cauliculi
 in¹ flore decerpti et in fictili novo operto cremati in
 furno, dein triti ex vino. et ambustis foliorum cinis
 medetur. inguen si² intumescat ex ulcere, satis est

¹ in *add. C. F. W. Müller* : *om. codd.*

² inguen si V², *Deilefsen* : inguen ne *vulg.*, *Mayhoff* : inguem
 et V¹ : inguine E : in ungue et d.

^a For *pterygia* see note on § 9, and for *epinyctis* p. 499
 note d.

^b In spite of the order, *ex vino* must go with *triti*. This
 throws some doubt on the exact meaning in many passages
 of Pliny where the prepositional phrase could, as far as sense
 goes, be taken either with the participle or with the finite
 verb.

juice and wax salve, and this is also used for the wounds of venomous spiders. The juice also darkens the hair. The oil from the same myrtle is milder than the juice, and so also is myrtle wine, which never intoxicates. When fully matured the wine settles the bowels and the stomach, cures colic and dispels squeamishness. The dried leaves, powdered and dusted over the body, check perspiration even in fever; it is useful also for coeliac trouble, prolapse of the uterus, affections of the anus, running sores, as a fomentation for erysipelas, for loss of hair, scaly eruptions, other eruptions also, and burns. The powder forms an ingredient in the plasters called *liparæ* (emollient), for the same reason as the oil also is which is made from the leaves, for it is a very efficient application to the moist parts of the body, the mouth for instance and the uterus. The pounded leaves themselves are taken in wine as an antidote to the poison of tree-fungi, and moreover mixed with wax are used for diseases of the joints and for gatherings. A decoction of them in wine is prescribed to be taken by sufferers from dysentery and dropsy. They are dried to a powder which is dusted on sores and haemorrhages. They clear away freckles also, hangnails, whitlows, sores on the eyelid,^a condylomata, affections of the testicles, offensive sores, and also, with wax salve, burns. For pus in the ears they use both the burnt leaves and the juice as well as the decoction. The leaves are also burnt to afford material for antidotes; stalks too, plucked when in flower, are burnt in a furnace in a newly-made clay pot with the lid on and then pounded in wine.^b The ashes too of the leaves cure burns. If from a sore there be a swelling in the groin, it is a

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surculum tantum myrti habere secum nec ferro nec terra contactum.

- 164 LXXXII. Myrtidanum diximus quomodo fieret. vulvae prodest adpositu, fotu et inlitu, multo¹ efficacius et cortice et folio et semine. exprimitur et foliis sucus mollissimis in pila tuis, adfuso paulatim vino austero, alias aqua caelesti, atque etiam expresso utuntur ad oris sedisque ulcera, vulvae et ventris, capillorum nigritiam, alarum perfusiones, purgationes lentiginum et ubi constringendum aliquid est.
- 165 LXXXIII. Myrtus silvestris, sive oxymyrsine sive chamaemyrsine, bacis rubentibus et brevitate a sativa distat. radix eius in honore est, decocta vino ad renium dolores potu² et difficili urinae praecipueque crassae et graveolenti, morbo regio, et vulvarum purgationi trita cum vino, cauliculi quoque incipientes asparagorum modo in cibo
- 166 sumpti et in cinere cocti. semen cum vino potum aut oleo et aceto calculos frangit, item in aceto et rosaceo tritum capitis dolores sedat, et potum

¹ multo dE *vulg.*, *Detlefsen*: multu V: myrto *Mayhoff coll. Diosc. I. 112 § 4*: τὸ δὲ μυρτίδανον λεγόμενον ἐπίφυσις ἐστὶν ἀνώμαλος καὶ ὀχθῶδης καὶ ὁμόχρους, οἷον εἰ χεῖρες περὶ τὴν μυρσίνης πρέμνον. στύφει δὲ μᾶλλον τῆς μυρσίνης. *Sed loci non ita similes sunt, atque myrtidanum apud Plinium (cf. XIV. 104) aliud, aliud apud Dioscoridem significat.*

² potu Vd, *Detlefsen*: pota *Mayhoff*.

sufficient remedy merely to carry on the person a sprig of myrtle that has touched neither iron nor the ground.

LXXXII. I have described ^a the preparation of *Myrtidanum*. myrtidanum. It is beneficial to the uterus, whether used as a pessary, a fomentation, or a liniment, being much more efficacious than the bark of the tree or the leaves or the berries. There is also extracted a juice from the leaves; the most tender are crushed in a mortar, a dry wine or sometimes rain water poured on them little by little, and the liquid now ^b drawn off. It is used for sores in the mouth and of the anus, for those of the uterus, or of the intestines, for darkening the hair, for moisture at the arm-pits, for clearing away freckles, and whenever an astringent remedy is indicated.

LXXXIII. The wild myrtle, oxymyrsine ^c or *Wild myrtle*. chamaemyrsine,^d is distinguished from the cultivated by its red berries and small size. Its root is much esteemed. A decoction in wine is taken for pains in the kidneys and for strangury, particularly when the urine is thick and of foul odour; for jaundice and purging the uterus it is pounded with wine. The young stalks also are cooked in ashes and taken as food in the same way as asparagus. The berries, taken with wine or with oil and vinegar, break up stone in the bladder; pounded also in vinegar and rose oil it relieves headache, and taken in drink the

^a See XIV. § 104. It is myrtle wine, but the *μυρτίδαρον* of Dioscorides is different. See critical note.

^b Such apparently is the sense of *etiam* here, the *iam* predominating.

^c Oxymyrsine = prickly myrtle.

^d Chamaemyrsine = ground myrtle.

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morbum regium. Castor oxymyrsinen myrti foliis¹ acutis, ex qua fiunt ruri scopae, ruscum vocavit, ad eosdem usus. Et hactenus habent se medicinae urbanarum arborum, transeamus ad silvestres.

¹ myrti foliis *Deilefsen*: myrti . . . foliisque *Mayhoff*, qui ramulis vel cauliculis excidisse putat: myrti foliisque *multi codd.*

jaundice. Castor gave the name of *ruscum*^a to the oxymyrsine, having leaves which are a myrtle's but prickly, from which in the country they make brooms; its medicinal properties are the same. So much for the medicines derived from cultivated trees of our cities; let me pass on to the wild ones of the woods.

^a Butcher's broom.

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